

# Service Manual

Simplified

Dolby NR-Equipped  
Stereo Double Cassette Deck

Cassette Deck

DOLBY B·C NR HX PRO

RS-X920

Colour

(K)... Black Type

Area

Suffix for Model No.	Area	Colour
(E)	Europe.	(K)
(EB)	Great Britain.	
(EG)	Germany and Italy.	



- Please file and use this manual together with the service manual for Model No. RS-X902, Order No. AD9103047C2.
- This service manual indicates the main differences between; Original RS-X902.

## ■ LINE-UP OF COMPONENTS

System Name	Unit
SC-X920 (E)	ST-X902LA (E) : Tuner
	SU-X920D (E) : Amplifier
	RS-X920 (E) : Cassette Deck
	_____ : CD Player
	SL-J110R (E) : Turntable
	SB-CS95 (E) : Speaker (Made in PAES)
SC-X920 (EB)	ST-X902LA (EB) : Tuner
	SU-X920D (EB) : Amplifier
	RS-X920 (EB) : Cassette Deck
	SL-PJ38A (EB) : CD Player (Made in MBV)
	SL-J110R (EB) : Turntable
	SB-CS95 (E) : Speaker (Made in PAES)
SC-X920 (EG)	ST-X902LA (EG) : Tuner
	SU-X920D (EG) : Amplifier
	RS-X920 (EG) : Cassette Deck
	SL-PJ38A (EG) : CD Player (Made in MBV)
	SL-J110R (EG) : Turntable
	SB-CS95 (E) : Speaker (Made in PAES)

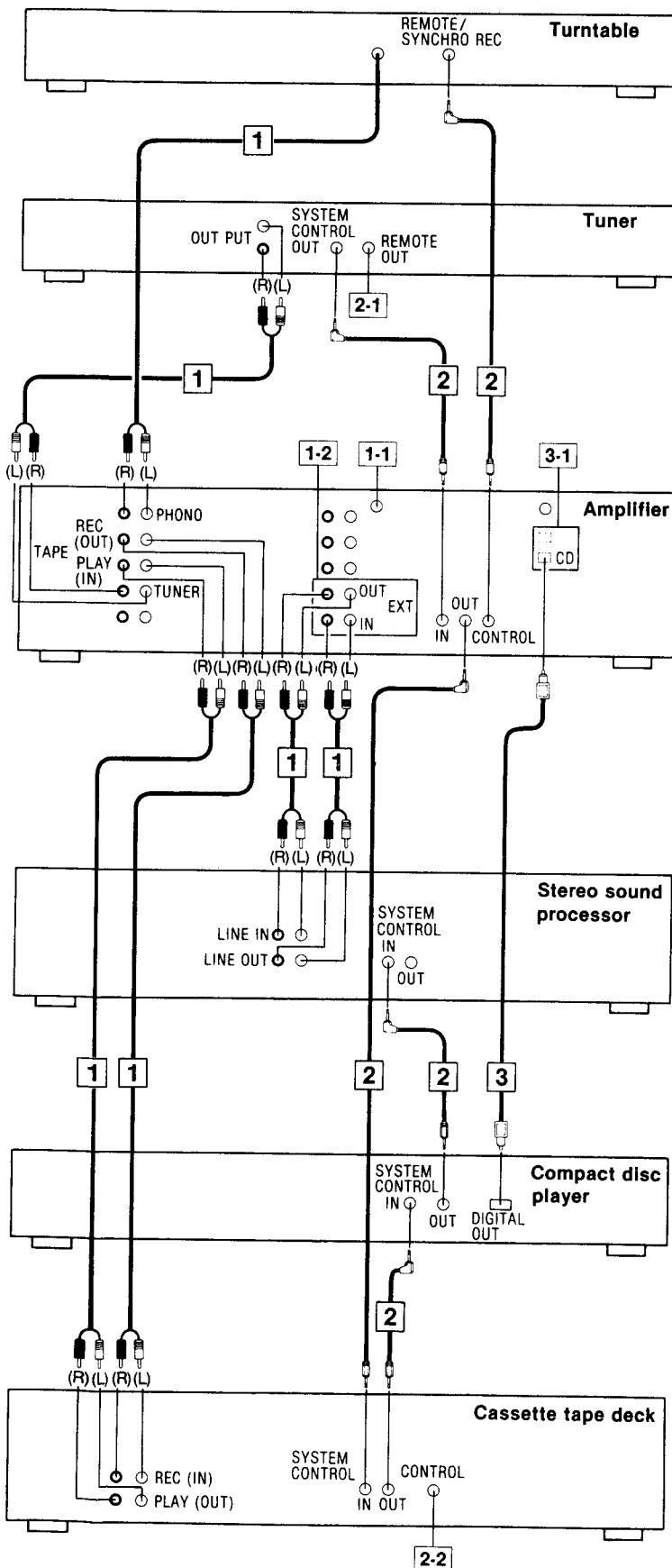
System Name	Unit
SC-X920 (EI)	ST-X902LA (EI) : Tuner (Made in PFS)
	SU-X920D (EG) : Amplifier
	RS-X920 (EG) : Cassette Deck
	SL-PJ38A (EG) : CD Player (Made in MBV)
	SL-J110R (EG) : Turntable
	SB-CS95 (E) : Speaker (Made in PAES)
SC-X920 (EF)	ST-X902LA (EF) : Tuner (Made in PFS)
	SU-X920D (E) : Amplifier
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	SB-CS95 (E) : Speaker (Made in PAES)

\* HX Pro headroom extension originated by Bang 'Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation.  
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Technics

## ■ CONNECTIONS

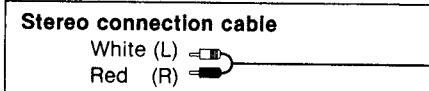
### Connections of each unit



Connection diagrams shown are for connections to a Technics hi-fi component system.  
Make connections in the numbered sequential order.

## 1 Connect the stereo connection cables

(included with the turntable, tuner, stereo sound processor, and cassette tape deck).

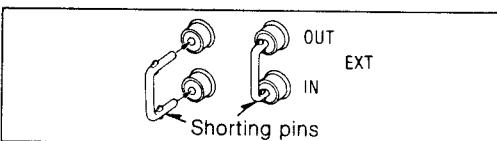


## 1-1 “GND” terminal of the amplifier

This terminal is for use with a turntable which has a ground wire.

## 1-2 “EXT” terminals of the amplifier

When these terminals are not in use, be sure to insert the "shorting" pins (included).



**2 Connect the L-type cable** (included with the turntable, tuner, stereo sound processor, compact disc player, and cassette tape deck).

2-1

#### **“REMOTE OUT” terminal**

This terminal is used to connect to the "REMOTE IN" terminal of the Technics multi-compact disc player (not included).

2-2

## **“CONTROL” terminal**

Make a connection from this terminal to the "CONTROL" terminal for a cassette deck on a Technics multi compact disc player.

(For detailed information, refer to the operating instructions of the Technics multi compact disc player.)

### 3 Connect the optical-fiber cable (included with the compact disc player).

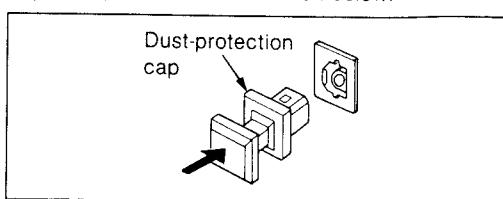
3-1

## **“DIGITAL IN” (CD, DAT) terminals of the amplifier**

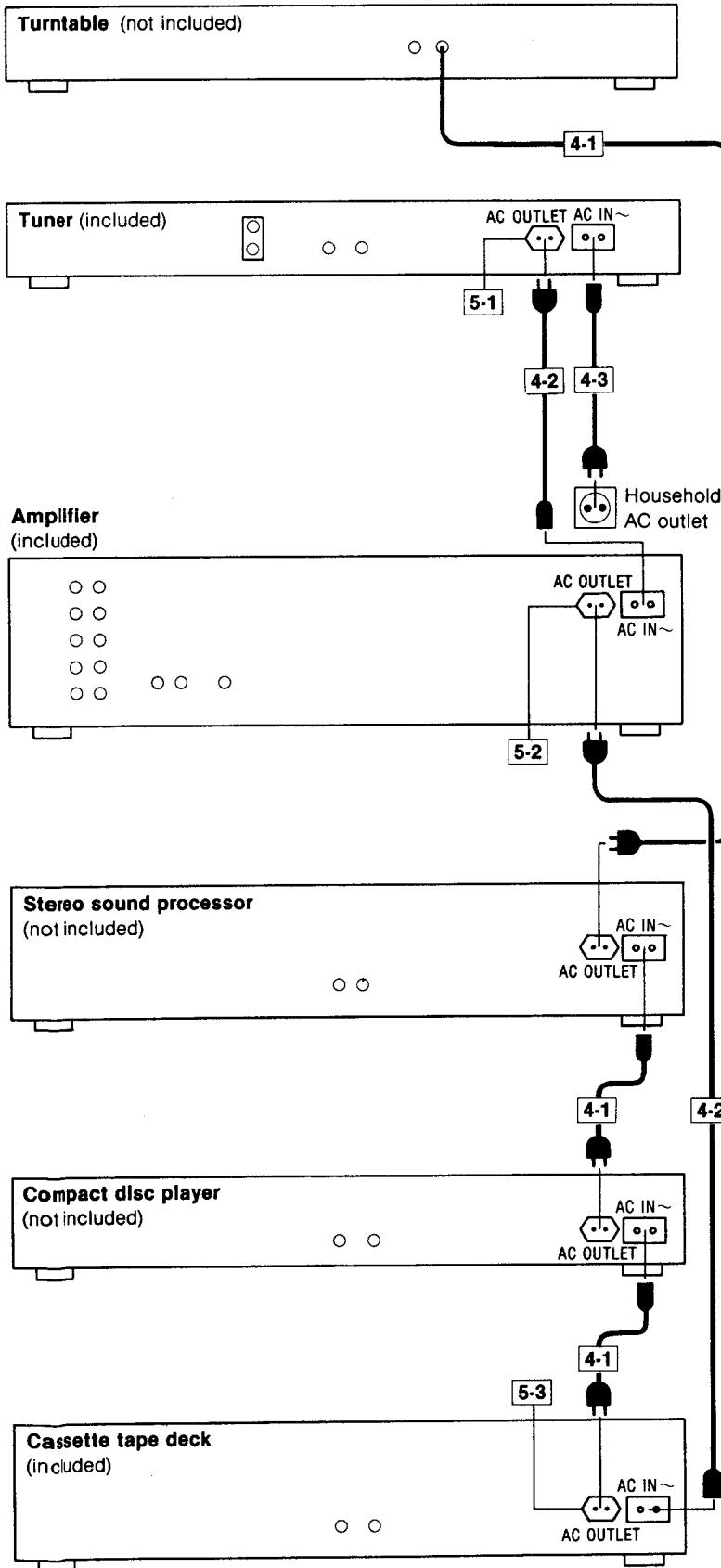
These terminals are protected by the dust-protection caps to avoid damage by the dust, etc.

Remove the caps only when the "DIGITAL IN" terminals are to be used.

When these terminals are not being used, attach the caps as shown in the illustration below.



## Connections of each unit (continued)



**4 Connect the AC power supply cords.**

**4-1 Connect the AC power supply cords (not included).**

**4-2 Connect the AC power supply cords (short for continental Europe) (included).**

**4-3 Connect the AC power supply cord (long for continental Europe) (included).**

Connect this cord only after all other cables have been connected.

**For areas except continental Europe**  
If the power plug will not fit your socket, use the power plug adaptor (included).

**Notes:**

- Configuration of the AC outlets and AC power supply cords differ according to area.
- If the compact disc player is not used in combination with these components, connect the AC power supply cord of the stereo sound processor to the AC outlet of the cassette deck.

**5 "AC OUTLET"****5-1 "SWITCHED" outlet**

Power is controlled by the power switch. Audio equipment rated up to 500 W can be connected here.

**5-2 "UNSWITCHED" outlet:**

Power is always available, regardless of power switch. Audio equipment rated up to 60 W can be connected here.

**5-3 "UNSWITCHED" outlet:**

Power is always available, regardless of power switch. Audio equipment rated up to 100 W can be connected here.

**Note:**

If other audio equipments are to be connected to these outlets, make sure that the total power consumption does not exceed the rating of each outlet.

After other units have been connected, tie up the cords in a bundle with a clip, etc. and place them behind the units.

**CHANGE IN REPLACEMENT PARTS LIST (on pages 32~36, 39, 40, 45)**

**Notes:** • Mentioned in this parts list is only those different from Model No. RS-X902 (E). All other parts are the same as for RS-X902 (E).

**• Important safety notice:**

Components identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Change of Part No.		Part Name & Description	Remarks
	RS-X902 (E)	RS-X920 (E, EB, EG)		
<b>INTEGRATED CIRCUIT(S)</b>				
IC971	DN6851ALB	LB9051A-WD	HALL (DECK 1)	
IC971A	DN6851ALB	LB9051A-WD	HALL (DECK 2)	
<b>TRANSISTOR(S)</b>				
Q5-8	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q9-14	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q103, 104	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q107, 108	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q109-112	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q303	KSB564ACYGTA	2SB621A-R	TRANSISTOR	
Q353	KSB564ACYGTA	2SB621A-R	TRANSISTOR	
Q551	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q607	KSB564ACYGTA	2SB621A-R	TRANSISTOR	
Q816	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q905	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q911	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q918	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q929	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q932	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
<b>CONNECTOR(S)</b>				
CN4	RJS1A1704	RJS1A6604	CONNECTOR (4P)	
CN6	RJS1A1704	RJS1A6604	CONNECTOR (4P)	
CN600A	RJS1A1703	RJS1A6603	CONNECTOR (3P)	
CN600B	RJS1A1703	RJS1A6603	CONNECTOR (3P)	
<b>JACK(S)</b>				
JK702	RJS1A4902-B	RJS1A4802-B	AC OUTLET	(EB) $\Delta$
		RJS1A4902-B	AC OUTLET	(E, EG) $\Delta$
<b>FLAT CABLE(S)</b>				
W3	RWJ0210200QQ	RWJ5710200QQ	FLAT CABLE (10P)	
W5	RWJ0210200QQ	RWJ5710200QQ	FLAT CABLE (10P)	
W8	RWJ0210200KQ	RWJ5710200KQ	FLAT CABLE (10P)	
<b>RESISTORS</b>				
R35, 36	ERDS2TJ474	ERDS2TJ394	C. RESISTOR, 1/4W, 390k $\Omega$	
R141, 142	ERDS2TJ103	ERDS2TJ562	C. RESISTOR, 1/4W, 5.6k $\Omega$	
R144, 145	ERDS2TJ103	ERDS2TJ562	C. RESISTOR, 1/4W, 5.6k $\Omega$	
<b>CAPACITORS</b>				
C7-10	ECBT1H561KB5	ECBT1H471KB5	C. CAPACITOR, 50V, 470pF	
C13, 14	ECEA0JKA101B	ECEA1AU101	E. CAPACITOR, 10V, 100 $\mu$ F	
C15, 16	ECQB1H682JZ3	ECQB1H822JF3	C. CAPACITOR, 50V, 8200pF	
C21	ECEA0JKA101B	ECEA1AU101	E. CAPACITOR, 10V, 100 $\mu$ F	
C57, 58	ECEA1AKA470B	ECEA1CKA470B	E. CAPACITOR, 16V, 47 $\mu$ F	
C131, 132	ECQB1H822JZ	ECQB1H153JF3	C. CAPACITOR, 50V, 0.015 $\mu$ F	
C135, 136	ECQB1H822JZ	ECQB1H153JF3	C. CAPACITOR, 50V, 0.015 $\mu$ F	

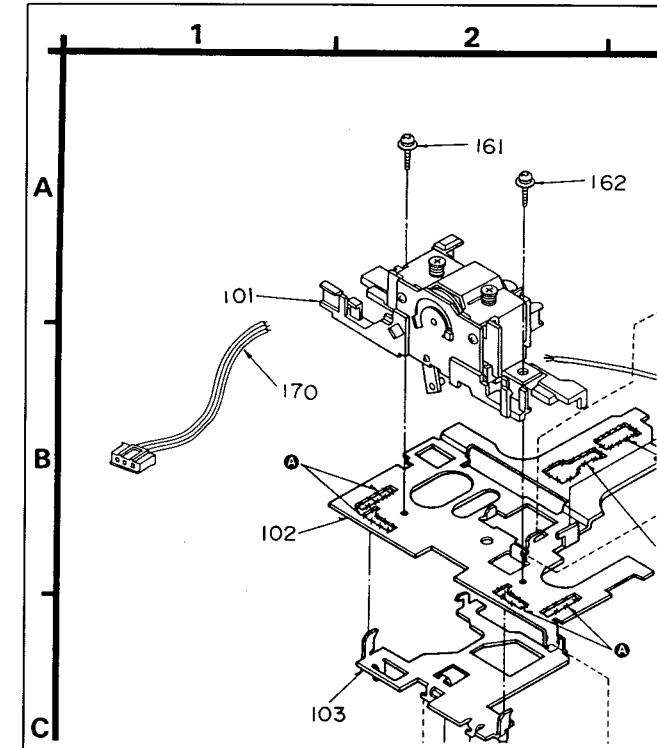
Ref. No.	Change of Part No.		Part Name & Description	Remarks
	RS-X902 (E)	RS-X920 (E, EB, EG)		
<b>CABINET AND CHASSIS</b>				
3	RYF0136-K	RYF0136B-K	CASSETTE LID (DECK 1)	
4	RYF0137-K	RYF0137B-K	CASSETTE LID (DECK 2)	
6	RGR0102C-D	RGR0102B-D1	REAR PANEL	(EB)
		RGR0102C-F1	REAR PANEL	(EG)
		RGR0102C-H1	REAR PANEL	(E)
7	RJS1A4902-A	RJS1A4802-A	AC OUTLET COVER	(EB)
		RJS1A4902-A	AC OUTLET COVER	(E, EG)
13	RGG0066-K	RGG0066B-K	FRONT AL PANEL	
14	RFKGSX502E-K	RFKGSX520E-K	FRONT PANEL ASS'Y	
<b>PACKING MATERIAL</b>				
P1	RPG0845	RPG1209	PACKING CASE	
P3	SPSD152	RPQ0164	ACCESSORIES PAD	
P4	SPP756	XZB50X65A02Z	PROTECTION COVER (UNIT)	
P5	—	XZB24X34C04	PROTECTION BAG (ACCESSORIES)	Addition
<b>ACCESSORIES</b>				
A1	RQF1078	—	INSTRUCTION MANUAL UNIT	(E) Deletion
		—	INSTRUCTION MANUAL UNIT	(EB) Deletion
		—	INSTRUCTION MANUAL UNIT	(EG) Deletion
A1-1	RFKSSX902E-K	RFKSCX520DEK	INSTRUCTION MANUAL ASS'Y	(E)
		RQT1493-D	INSTRUCTION MANUAL	(EG)
		RQT1494-B	INSTRUCTION MANUAL	(EB)
A2	SJA187	RJA0018-1K	AC POWER SUPPLY CORD	(E, EG) △
		SJA188	AC POWER SUPPLY CORD	(EB) △
A3	SJP2249-3	SJP2276	STEREO CONNECTION CABLE	
<b>MECHANISM PARTS LIST</b>				
<b>DECK 1</b>				
161	XTW2+6L	SCREW	Change of Pcs.	
162	XTW2+8L	—	SCREW	Deletion
<b>DECK 2</b>				
261	XTW2+6L	SCREW	Change of Pcs.	
262	XTW2+8L	—	SCREW	Deletion

## ■ EXPLODED VIEWS (on pages 41, 43.)

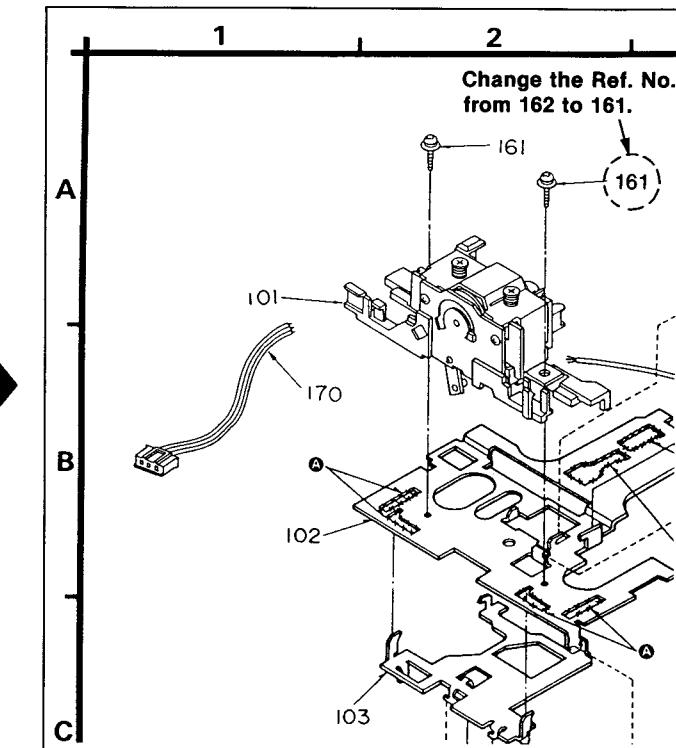
### • Mechanical parts

RS-X902

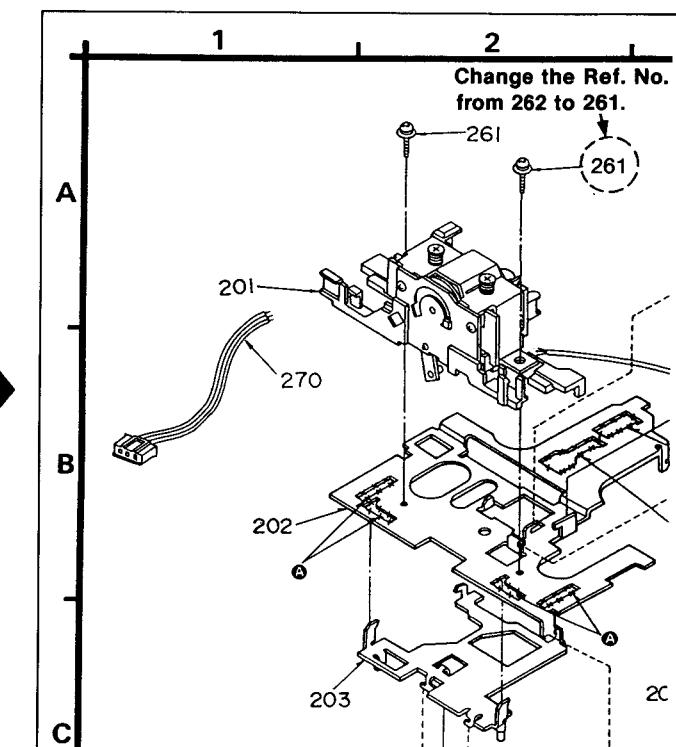
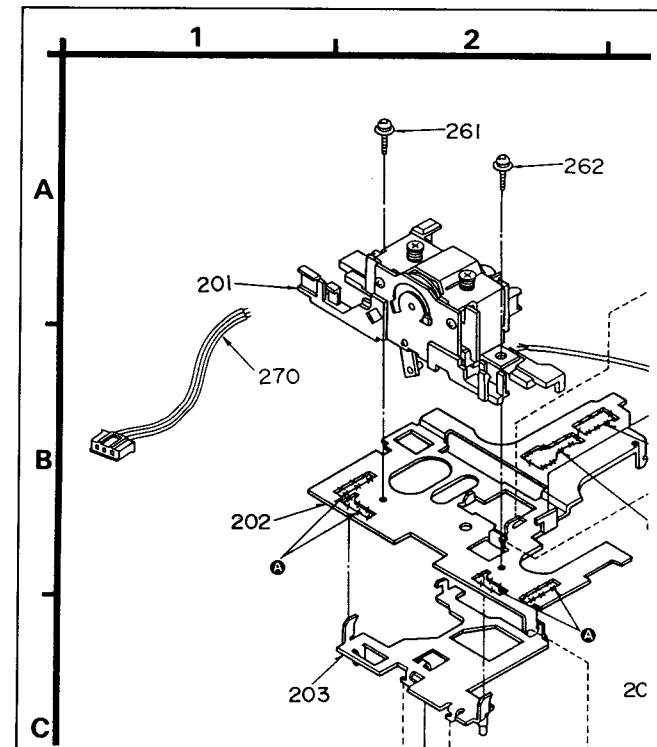
## • DECK 1



RS-X920

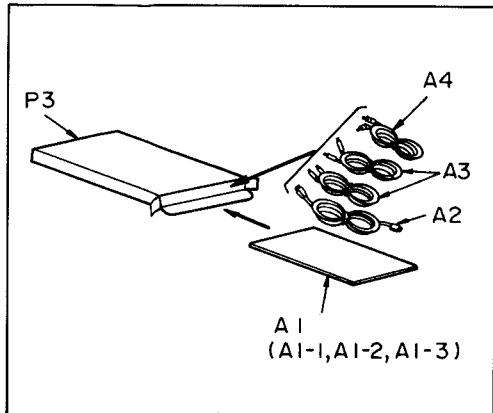


## • DECK 2

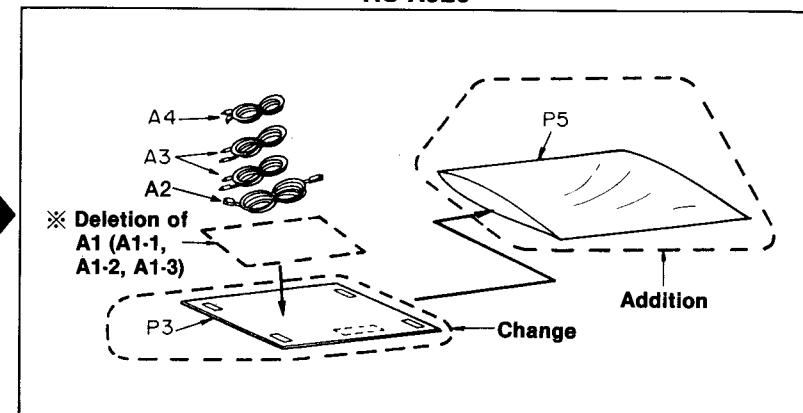


## ■ PACKAGING (on page 31.)

RS-X902



RS-X920



## ※ Note:

This packaging not illustrated Ref. No. A1 (A1-1, A1-2, A1-3). Refer to the packaging on page 42 of the service manual for Model No. SU-X902, Order No. AD9103052C2.

# Service Manual

Cassette Deck

Dolby NR-Equipped  
Stereo Double Cassette Deck

 \* DOLBY B·C NR HX PRO



\* HX Pro headroom extension originated by Bang Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation.  
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## MECHANISM SERIES (AR300)

## SPECIFICATIONS

### ■ CASSETTE DECK SECTION

Deck system	Stereo cassette deck	Wow and flutter	0.07% (WRMS)
Track system	4-track, 2-channel		±0.2% (DIN)
Heads		Fast forward and rewind times	Approx. 110 seconds with C-60 cassette tape
(tape deck 1) Rec/play	Permalloy head	Input sensitivity and impedance	LINE IN 60 mV/47 kΩ
Erasing	Double-gap ferrite head	Output voltage and impedance	LINE OUT 400 mV/800Ω
(tape deck 2) Rec/play	Permalloy head		
Erasing	Double-gap ferrite head		
Motors			
(tape deck 1) Capstan	DC servo motor		
(tape deck 2) Capstan	DC servo motor		
Recording system	AC bias		
Bias frequency	80 kHz		
Erasing system	AC erase		
Tape speeds	4.8 cm/sec. (1 7/8 ips)		
Frequency response			
NORMAL	30 Hz~16 kHz	■ GENERAL	20 W
	40 Hz~15 kHz (DIN)	Power consumption	AC 50 Hz/60 Hz, 230~240 V
CrO <sub>2</sub>	30 Hz~17 kHz	Power supply	360×129×297 mm
	40 Hz~16 kHz (DIN)	Dimensions (W×H×D)	(14 <sup>3</sup> / <sub>16</sub> "×5 <sup>9</sup> / <sub>32</sub> "×11 <sup>11</sup> / <sub>16</sub> ")
METAL	30 Hz~18 kHz	Weight	4.6 kg (10.1 lb.)
	40 Hz~17 kHz (DIN)		
S/N (signal level=max recording level, CrO <sub>2</sub> type tape)			
Dolby C NR on	74 dB (CCIR)		
Dolby B NR on	66 dB (CCIR)		
Dolby NR off	56 dB (A weighted)		

**Note:**  
Specifications are subject to change without notice.  
Weight and dimensions are approximate.

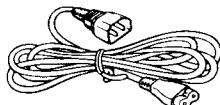
# Technics

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## ■ ACCESSORIES



AC power supply cord  
(SJA187) ..... (E, EG)  
(SJA188) ..... (EB) ..... 1pc.



L-type cable  
(SJP2257T) ..... 1pc.

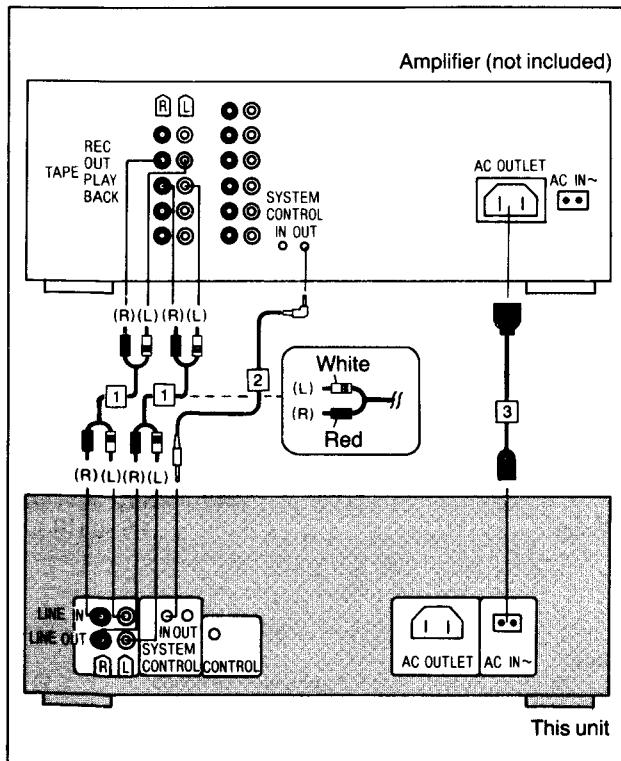


Stereo connection cables  
(SJP2249-3) ..... 2pcs.

## ■ CONNECTIONS

Make connections in the numbered sequence by using the included cables.

- 1 Connect the stereo connection cables.
- 2 Connect the L-type cable.
- 3 Connect the AC power supply cord to the "AC OUTLET" of the amplifier or the household AC outlet.



The illustration at the left shows an example of connections made when this unit is combined with a Technics hi-fi component system, and shows only the connections to be made to and from this unit in that combination.

Refer to the illustration together with the instructions provided below.

### "SYSTEM CONTROL IN" terminal

Make a connection from this terminal to the "SYSTEM CONTROL OUT" terminal for a cassette deck on a Technics amplifier. (For detailed information, refer to the operating instructions of the Technics amplifier.)

### "SYSTEM CONTROL OUT" terminal

Make a connection from this terminal to the "SYSTEM CONTROL IN" terminal of a Technics stereo sound processor or to the "SYSTEM CONTROL IN" terminal of a Technics compact disc player. (For detailed information, refer to the operating instructions of the Technics stereo sound processor or the Technics compact disc player.)

(For detailed information, refer to the operating instructions of the Technics stereo sound processor or the Technics compact disc player.)

### "CONTROL" terminal

Make a connection from this terminal to the "CONTROL" terminal for a cassette deck on a Technics multi compact disc player. (For detailed information, refer to the operating instructions of the Technics multi compact disc player.)

### AC power supply cord (3)

#### Notes:

- The configuration of the AC outlet and AC power supply cord differs according to area.
- If this unit is not to be connected with the amplifier, the cord is to be connected to the household AC outlet.

#### For United Kingdom

Cut off and dispose of the plug and replace with a suitable plug. (Refer to "For United Kingdom" above.)

#### Household AC outlet



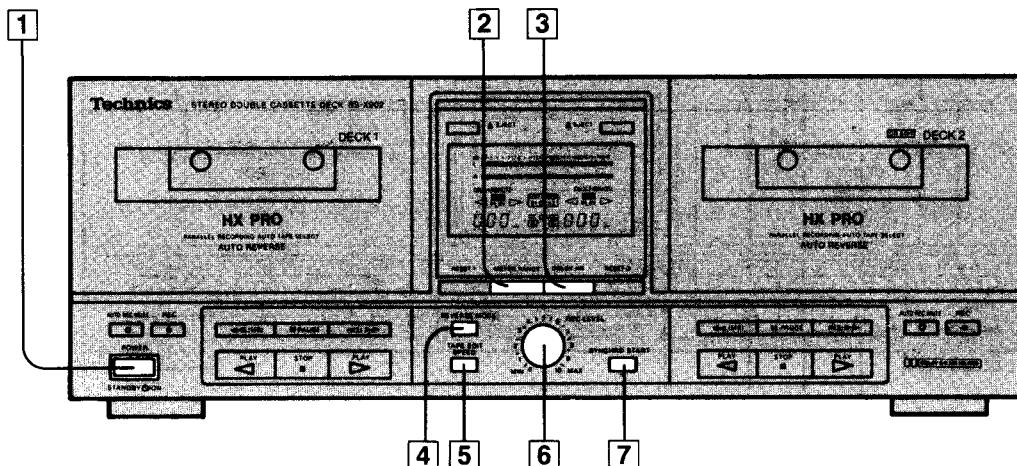
Fit a suitable plug to the AC power supply cord.

### "AC OUTLET"

#### "UNSWITCHED" outlet

Power is always available, regardless of power switch. Audio equipment rated up to 100 W can be connected.

## ■ LOCATION OF CONTROLS



### Controls common to both tape decks

#### 1 Power "STANDBY $\downarrow$ /ON" switch (POWER, STANDBY $\downarrow$ /ON)

This switch switches ON and OFF the secondary circuit power only. The unit is in the "standby" condition when this switch is set to the STANDBY  $\downarrow$  position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

#### 2 Meter-range selector (METER RANGE)

This selector can be used to select the meter-range display of the input level meter.

#### 3 Dolby noise-reduction selector (DOLBY NR)

This selector can be used to reduce the hiss noise that is characteristic of tape. This unit is provided with both the B-type and C-type noise-reduction systems.

#### 4 Reverse-mode selector (REVERSE MODE)

This selector can be used for selection of the reverse mode (for either playback or recording).

#### 5 Tape-to-tape recording tape-speed selector (TAPE EDIT SPEED)

This selector can be used to select the recording speed when a tape-to-tape recording is made.

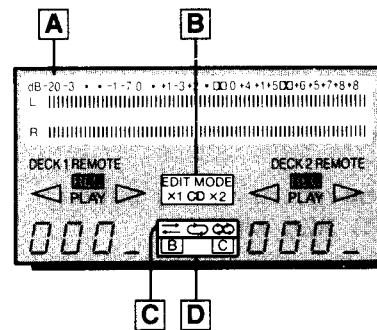
#### 6 Recording-level control (REC LEVEL)

This control can be used to regulate the recording level of both tape decks.

#### 7 Synchro-start button (SYNCHRO START)

This button can be used to start a tape-to-tape recording, simultaneously starting tape deck 1 (the playback deck) and tape deck 2 (the recording deck).

### Indicators common to both tape decks



#### A Input level meter

During playback, this meter indicates the level of the recorded sound source.

During recording, it indicates the level being recorded, adjusted by the recording-level control.

#### B Edit-recording indicators (EDIT MODE, CD, $\times 1$ , $\times 2$ )

The words "EDIT MODE" and " $\times 1$ " (or " $\times 2$ ") indicator will illuminate when a tape-to-tape recording is made.

The words "EDIT MODE" and "CD" indicator will illuminate when a CD edit-recording is made.

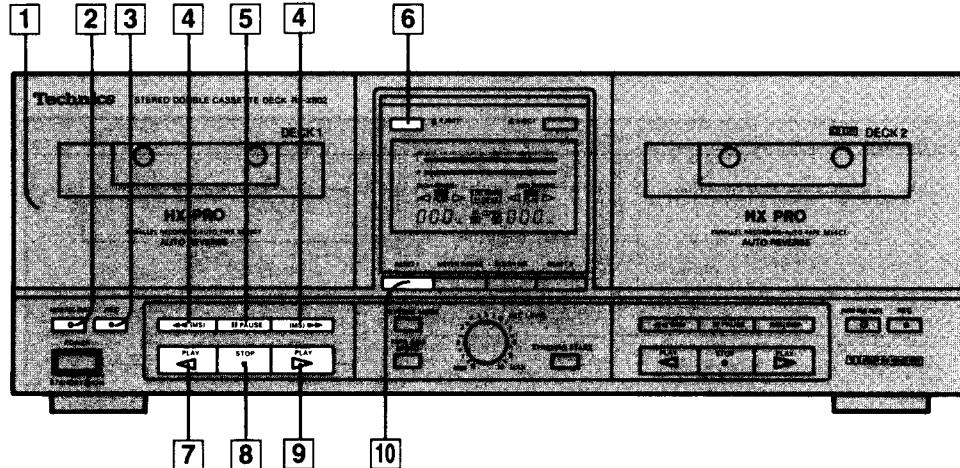
#### C Reverse-mode indicators ( $\rightarrow$ , $\leftarrow$ , $\infty$ )

One of these indicators illuminates to show which of the reverse modes was selected by the reverse-mode selector.

#### D Dolby noise-reduction indicators (B, C)

One of these indicators illuminates to show the type of Dolby noise-reduction system selected by pressing the Dolby noise-reduction selector.

## Tape deck 1



## Tape deck 2

## Controls applicable to tape decks 1 and 2

Both tape deck 1 and tape deck 2 have the same controls, indicators, etc., and have the same functions, so the following explanation, although for tape deck 1, is equally applicable to tape deck 2.

## 1 Cassette holder

2 Automatic-record-muting button  
(□ AUTO REC MUTE)

This button can be used to make a silent interval on the tape being recorded on the tape deck.

## 3 Record button (● REC)

This button can be used to change the tape deck to the recording stand-by mode.

4 Fast-forward/rewind/search buttons  
[◀◀ (MS), (MS) ▶▶]

These buttons can be used to fast-forward or rewind the tape, or to easily search for a tune's beginning quickly.

## 5 Pause button (■ PAUSE)

This button can be used to temporarily stop the tape playback or recording of the tape deck.

## 6 Eject button (▲ EJECT)

This button can be used to open the cassette holder.

## 7 Reverse-side playback button (◀ PLAY)

This button can be used to start the playback or recording of side "B" of the cassette.

(The tape will then begin moving in the right-to-left direction.)

## 8 Stop button (■ STOP)

This button can be used to stop tape movement.

## 9 Forward-side playback button (▷ PLAY)

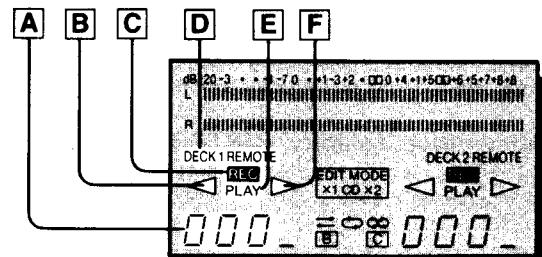
This button can be used to start the playback or recording of side "A" of the cassette.

(The tape will then begin moving in the left-to-right direction.)

10 Tape counter reset button  
(RESET 1, RESET 2)

This button can be used to reset the tape counter indication to "000".

## Indicators applicable to tape decks 1 and 2



## A Tape counter

Indicates the amount of tape movement (separately for tape deck 1 and tape deck 2).

## B Reverse-side indicator (◀)

Illuminates during playback or recording to indicate that side "B" of the tape is being used.

## C Recording indicator (REC)

This indicator illuminates to indicate that this tape deck is in the recording stand-by mode, or is recording.

D Remote-control indicator  
(DECK 1 REMOTE, DECK 2 REMOTE)

This indicator illuminates to indicate that this tape deck can now be controlled by the remote-control transmitter (included with tuner).

## E Playback indicator (PLAY)

When this indicator illuminates steadily, it indicates that this tape deck is in the playback mode or the recording mode. When it flashes continually, this is an indication that this tape deck is in the pause mode or the recording stand-by mode. When it flashes rapidly, this is an indication that this tape deck is in the search mode.

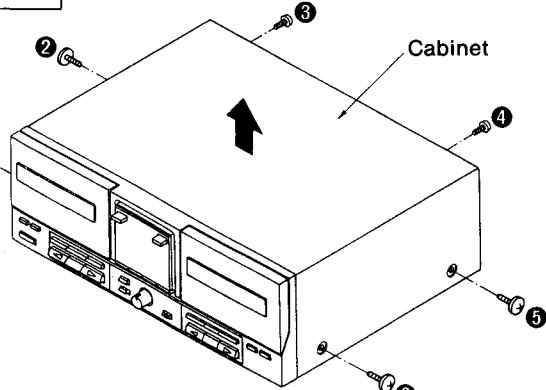
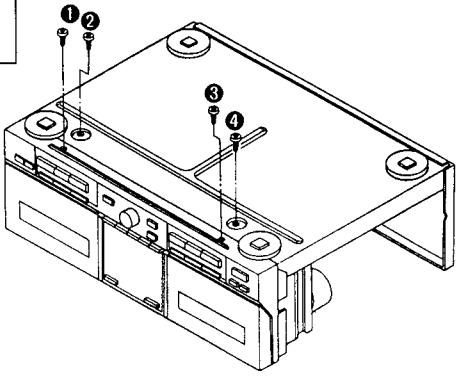
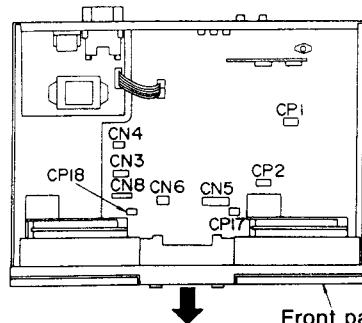
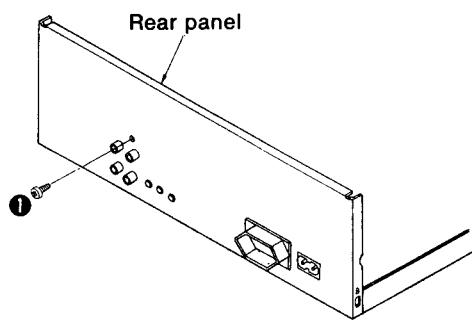
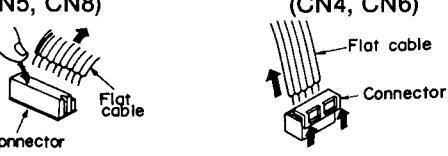
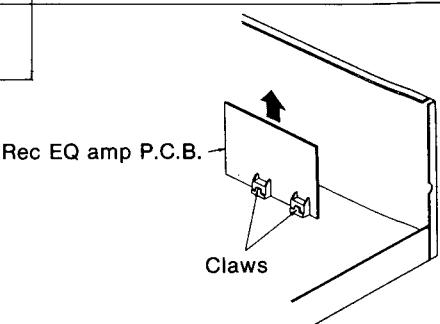
## F Forward-side indicator (▷)

Illuminates during playback or recording to indicate that side "A" of the tape is being used.

## ■ DISASSEMBLY INSTRUCTIONS

### “ATTENTION SERVICER”

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

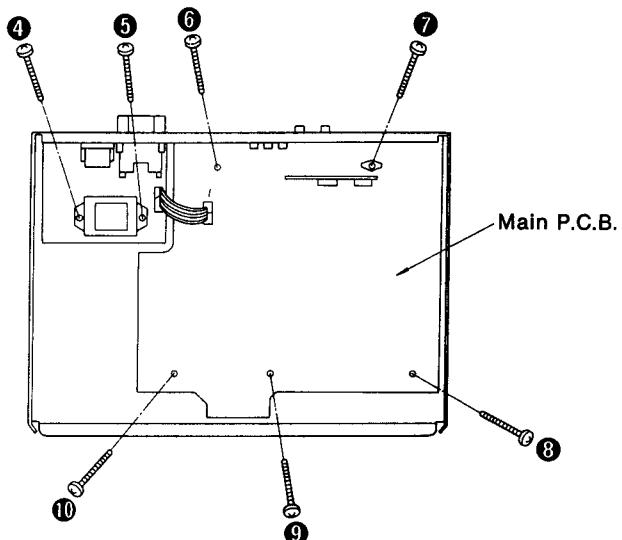
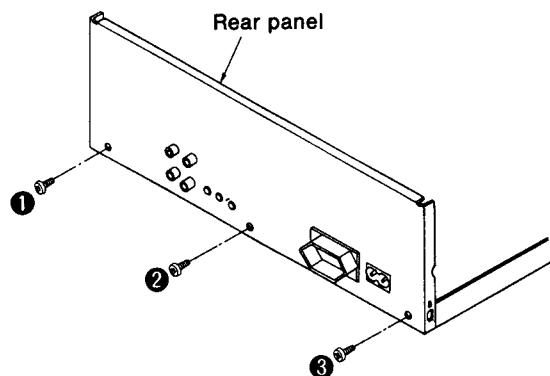
Ref. No. 1	Removal of the cabinet	Ref. No. 2	Removal of the front panel ass'y
Procedure 1	 <ul style="list-style-type: none"> <li>Remove the 6 screws (1~6).</li> </ul>	Procedure 1→2	 <ol style="list-style-type: none"> <li>Remove the 4 screws (1~4).</li> </ol>
Ref. No. 3	Removal of the main P.C.B.		 <ol style="list-style-type: none"> <li>Remove the 1 screw (1).</li> </ol>
Procedure 1→2→3	 <ol style="list-style-type: none"> <li>Remove the 1 screw (1).</li> </ol>		<ol style="list-style-type: none"> <li>Remove the 4 connectors (CP1, CP2, CP17, CP18).</li> <li>Remove the 5 flat cables (CN3, CN4, CN5, CN6, CN8).</li> <li>Remove the front panel ass'y in the direction of arrow.</li> </ol> <p><b>How to remove the flat cable</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <ul style="list-style-type: none"> <li>Pull out the flat cable while pressing the connector.</li> </ul> </div> <div style="width: 45%;"> <ol style="list-style-type: none"> <li>Lift the connector.</li> <li>Pull out the flat cable. (CN4, CN6)</li> </ol>  </div> </div>
Ref. No. 4	Removal of the rec EQ amp P.C.B.	Procedure 1→4	 <ol style="list-style-type: none"> <li>Release the 2 claws and then remove the rec EQ amp P.C.B. in the direction of arrow.</li> </ol>

Ref. No. 5	<b>Removal of the FL meter P.C.B.</b>	Ref. No. 6	<b>Removal of the mechanism units (DECK 1, DECK 2)</b>
<b>Procedure</b> 1→2→5		<b>Procedure</b> 1→2→6	
1. Remove the 2 screws (1, 2). 2. Remove the FL meter P.C.B. in the direction of arrow.			
Ref. No. 7	<b>Removal of the mechanism angle</b>		
<b>Procedure</b> 1→2→5→6→7			
• Remove the 4 screws (1~4).			
Ref. No. 8	<b>Removal of the eject angle, eject buttons, and eject lever</b>		
<b>Procedure</b> 1→2→5→6→8			
1. Release the 1 claw. 2. Pull out the eject angle in the direction of arrow A.		3. Pull out the claw of the eject rod in the direction of arrow B, remove the eject buttons and the eject rod in the direction of arrow C.	4. Turn the eject lever in the direction of arrow D, and remove the eject lever in the direction of arrow E.

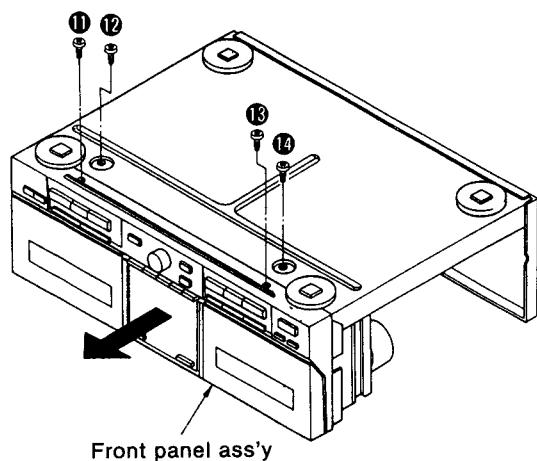
Ref. No. 9	<b>Removal of the cassette lid (DECK 1, DECK 2)</b>	Ref. No. 10	<b>Removal of the cassette holder (DECK 1, DECK 2)</b>
<b>Procedure 9</b>		<b>Procedure 1→2→5→6 →7→8→9→10</b>	
	<ul style="list-style-type: none"> <li>Lift the cassette lid in the direction of arrow A and remove it in the direction of arrow B.</li> </ul>		<ol style="list-style-type: none"> <li>Remove the 2 screws (1, 2).</li> <li>Remove the damper gear ass'y (L) and damper gear ass'y (R).</li> </ol>
Ref. No. 11	<b>Removal of the operation P.C.B.</b>		
<b>Procedure 1→2→5→6→7 →8→9→10→11</b>			
	<ol style="list-style-type: none"> <li>Remove the rec level knob.</li> </ol>		<ol style="list-style-type: none"> <li>Remove the springs in the direction of arrow A.</li> <li>Remove the ribs in the direction of arrow B.</li> <li>Remove the cassette holder in the direction of arrow C.</li> </ol>
		Ref. No. 12	<b>Removal of the power supply P.C.B.</b>
		<b>Procedure 1→12</b>	
	<ol style="list-style-type: none"> <li>Remove the 4 screws (1~4).</li> <li>Release the 14 claws.</li> </ol>		<ol style="list-style-type: none"> <li>Remove the 1 flat cable (CN701).</li> <li>Remove the 3 screws (1~3).</li> <li>Release the 2 claws of the AC outlet cover.</li> </ol>

Ref. No.  
13

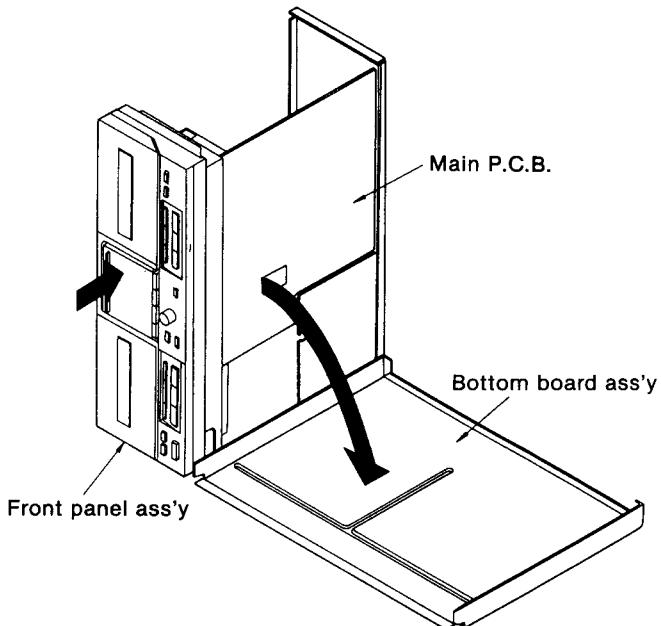
## How to check the main P.C.B.

Procedure  
1→13

1. Remove the 3 screws (1~3).



2. Remove the 7 screws (4~10).



3. Remove the 4 screws (11~14).

4. Remove the front panel ass'y in the direction of arrow.

5. Remove the bottom board ass'y.

6. Reinstall the front panel ass'y to the main P.C.B.

## MEASUREMENTS AND ADJUSTMENTS

### Measurement Condition

- Rec. level control; Maximum
- Reverse-mode selector switch;
- Tape-to-tape recording tape-speed selector; X1
- Dolby NR selector switch; Off

- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature  $20 \pm 5^\circ\text{C}$  ( $68 \pm 9^\circ\text{F}$ )

### Measuring Instrument

- EVM (Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator

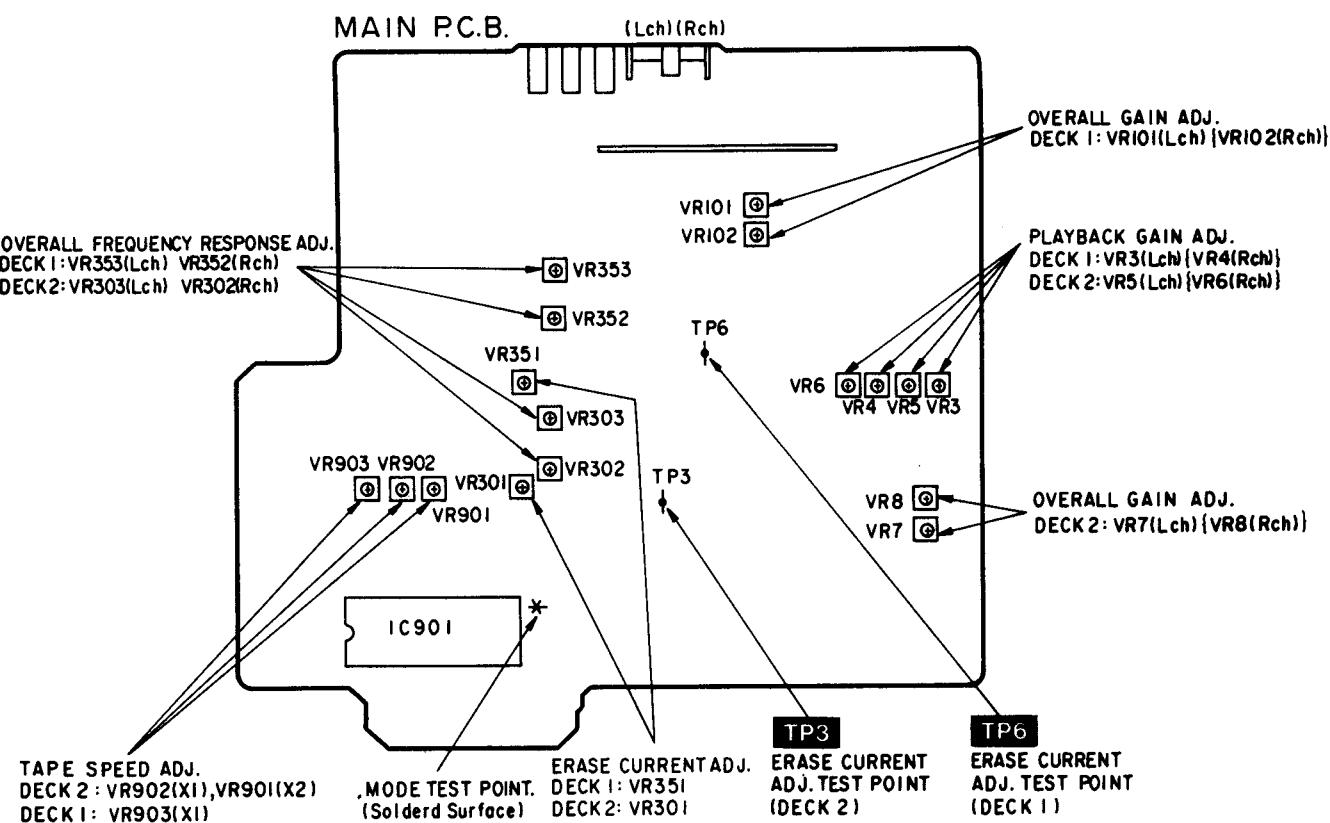
- ATT (Attenuator)
- DC voltmeter
- Resistor ( $600\Omega$ )

### Test tape

- Head azimuth adjustment (8kHz, -20dB); QZZCFM
- Tape speed adjustment (3kHz, -10dB); QZZCWAT
- Playback frequency response (315Hz, 12.5kHz, 10kHz, 8kHz, 4kHz, 1kHz, 250Hz, 125Hz, 63Hz, -20dB); QZZCFM

- Playback gain adjustment (315Hz, 0dB); QZZCFM
- Overall frequency response, Overall gain adjustment  
Normal reference blank tape; QZZCRA  
CrO<sub>2</sub> reference blank tape; QZZCRX  
Metal reference blank tape; QZZCRZ

### • Adjustment Points



**HEAD AZIMUTH ADJUSTMENT (DECK 1/2)**

1. Playback the azimuth adjustment portion (8kHz, -20dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the outputs of the L-CH and R-CH are maximized and the lissajous waveform, as illustrated, approaches 0 degrees.

**Note:** If L-CH and R-CH are not maximized at the same point, adjust to the point where the levels of each channel are maximized and equal.

2. Perform the same adjustment in the play mode.
3. After the adjustment, apply screwlock to the azimuth adjusting screw.

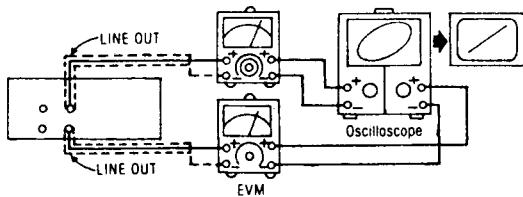


Fig. 1

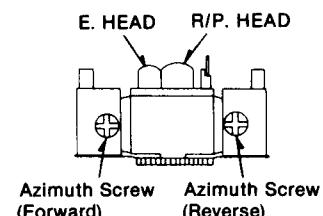


Fig. 2

**TAPE SPEED ADJUSTMENT (DECK 1/2)****Normal speed**

1. Shift the Tape-to-tape recording tape-speed selector to "X1" and press the synchro-start button.
2. Playback the middle portion of the test tape (QZZCWAT).
3. Adjust Deck 1=VR903 and Deck 2=VR902 so that the output is within the standard value.

**High speed**

4. Shift the Tape-to-tape recording tape-speed switch to "X2" and press the synchro-start button.
5. Playback the middle portion of the test tape (QZZCWAT).
6. Adjust Deck 2=VR901 so that the output is within the standard value.

**Note:** The Normal speed adjustment must be done before the High speed adjustment.

**(DECK 1) Standard value:  $3000 \pm 15$  Hz [Normal (X1)],  $6000 \pm 600$  Hz [High (X2), only confirmation]**

**(DECK 2) Standard value:  $3000 \pm 15$  Hz [Normal (X1)],  $6000 \pm 30$  Hz [High (X2)]**

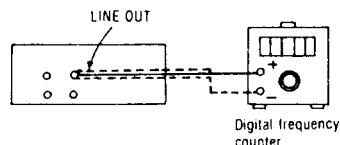


Fig. 3

**PLAYBACK GAIN ADJUSTMENT (DECK 1/2)**

1. Playback the gain adjusted portion (315Hz, 0dB) of the test tape (QZZCFM).
2. Adjust Deck 1=VR3 (L-CH) [[VR4 (R-CH)]] and Deck 2=VR5 (L-CH) [[VR6 (R-CH)]] so that the output is within the standard value.

**Standard value:  $0.4V \pm 0.5dB$**

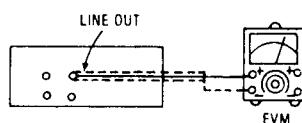


Fig. 4

**PLAYBACK FREQUENCY RESPONSE (DECK 1/2)**

1. Playback the frequency response portion (315Hz, 12.5kHz~63Hz, -20dB) of the test tape (QZZCFM).
2. Assure that the frequency response is within the range shown in Fig. 6 for both L-CH and R-CH.

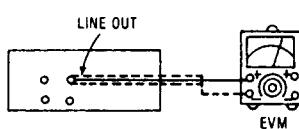


Fig. 5

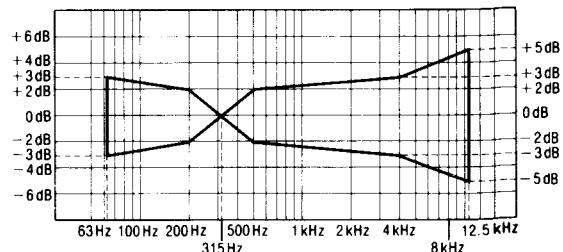


Fig. 6

**ERASE CURRENT ADJUSTMENT (DECK 1/2)**

1. Insert the Metal blank test tape (QZZCRZ) and set the unit to the Record Pause mode.
2. Adjust Deck 1=VR351 (Deck 2=VR301) so that the output between Deck 1=TP6 (Deck 2=TP3) and GND is within the standard value.

Standard value:  $190 \pm 5 \text{mA}$  (Metal)...EVM Reading:  $190 \pm 5 \text{mV}$

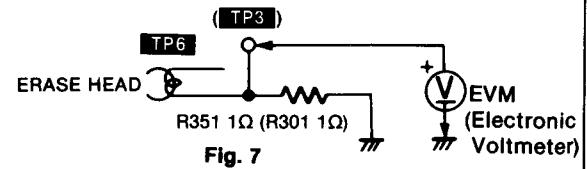


Fig. 7

**OVERALL FREQUENCY RESPONSE (DECK 1/2)**

1. Insert the Normal blank test tape (QZZCRA) and set the unit to the Record Pause mode.
2. Apply a reference input signal (1kHz, -24dB) through an attenuator.
3. Attenuate the signal by 20dB and adjust the frequency from 50Hz~10kHz.
4. Record the frequency sweep.
5. Playback the recorded signal and assure that it is within the range shown in Fig. 8 in comparison to the reference frequency (1kHz).
6. If it is not within the standard range, adjust Deck 1=VR353 (Deck 2=VR303) (L-CH) and Deck 1=VR352 (Deck 2=VR302) (R-CH) so that the frequency level is within the standard range.
  - Level up in high frequency range .....Increase the bias current.
  - Level down in high frequency range ...Decrease the bias current.
7. Repeat steps 2~6 above using the CrO<sub>2</sub> tape (QZZCRX) and the Metal tape (QZZCRZ) increasing the frequency range to 12.5kHz (50Hz~12.5kHz).
8. Assure that the level is within the range shown in Fig. 9.

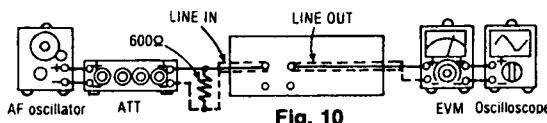


Fig. 10

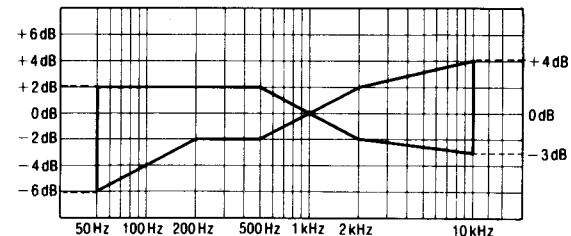
**Normal Overall frequency response chart (NR OUT)**

Fig. 8

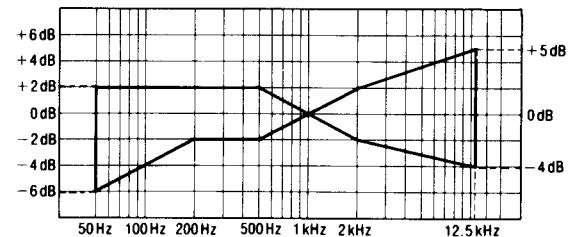
**CrO<sub>2</sub> Metal Overall frequency response chart (NR OUT)**

Fig. 9

**OVERALL GAIN ADJUSTMENT (DECK 1/2)**

1. Insert the Normal blank test tape (QZZCRA) and set the unit to the Record pause mode.
2. Apply a reference input signal (1kHz, -24dB). Attenuate the output so that its level becomes 0.4V.
3. Record this input signal.
4. Playback the signal recorded in step 3 above, and assure that the output is within the standard value.
5. If it is not within the standard value, adjust Deck 1=VR101 (Deck 2=VR7) (L-CH) and Deck 1=VR102 (Deck 2=VR8) (R-CH).
6. Repeat the step 2~5 above until the output is within the standard value.

Standard value:  $0.4 \text{V} \pm 0.5 \text{dB}$

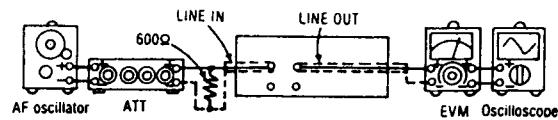
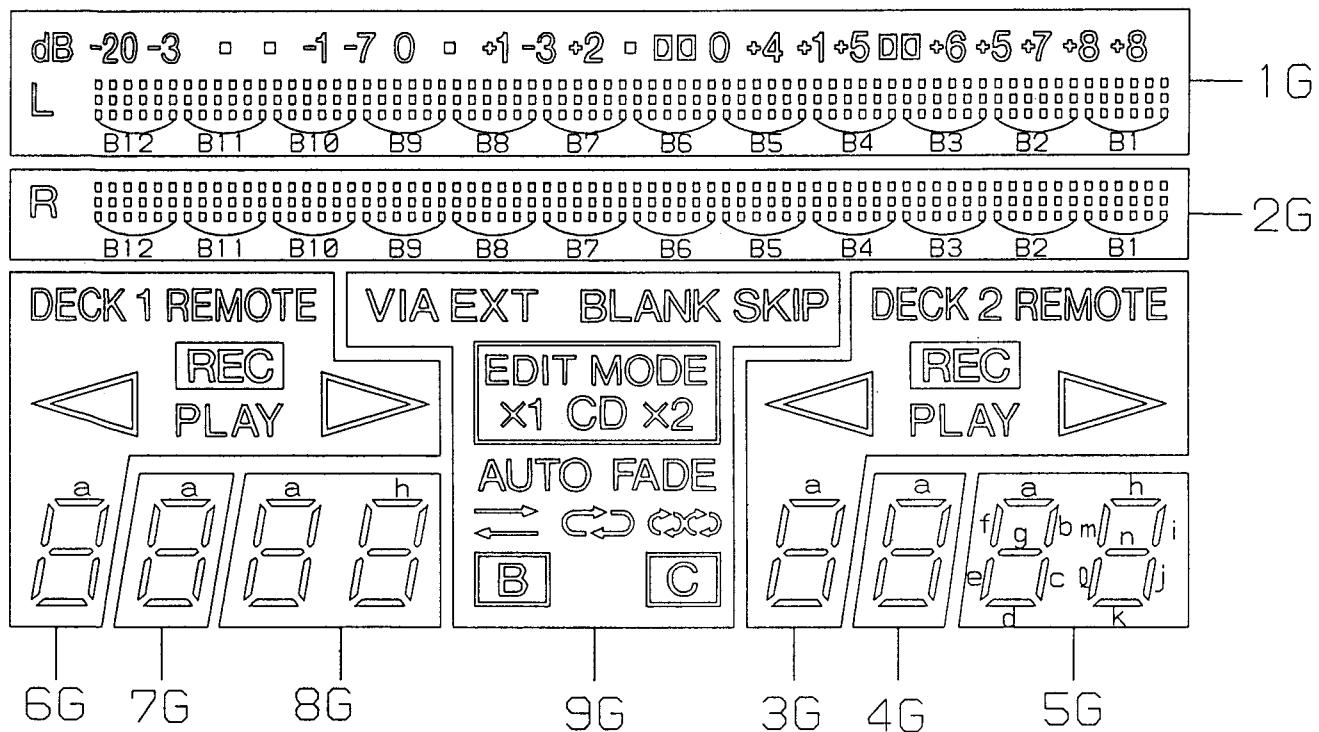


Fig. 11

## ■ INTERNAL CONNECTION OF FL

- Grid connection diagram



- Anode connection table

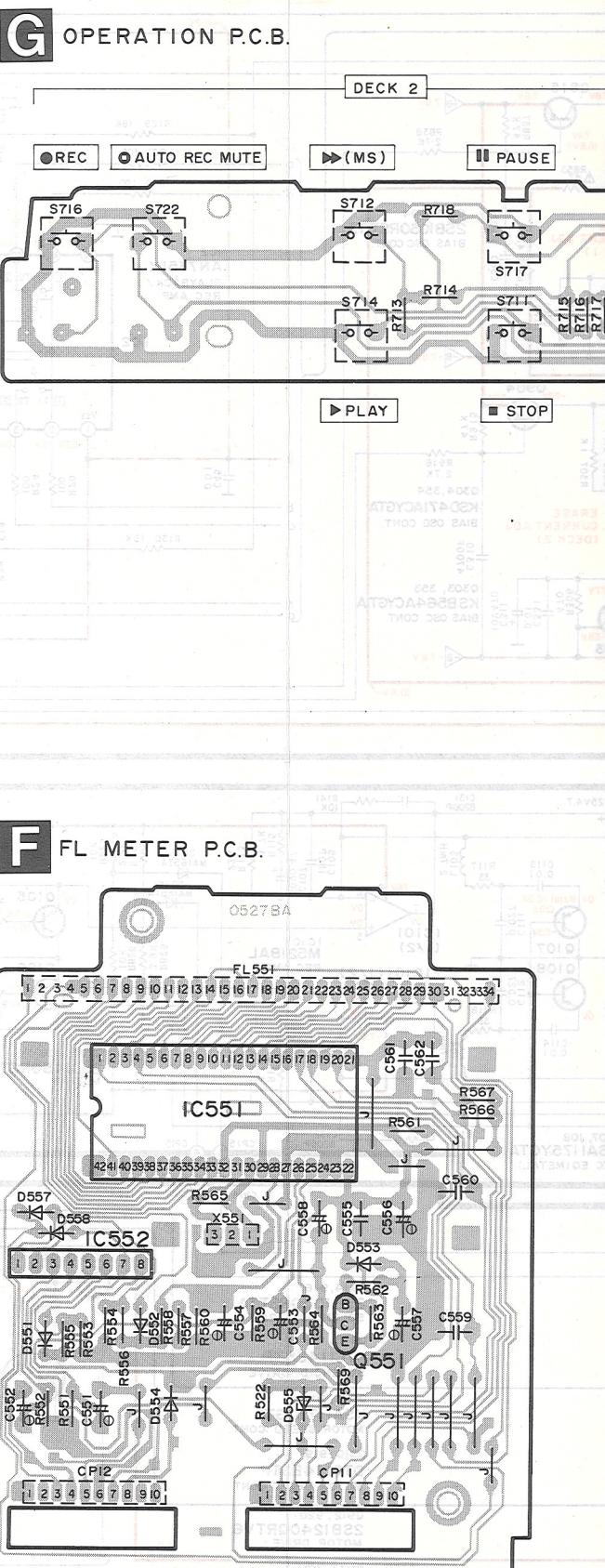
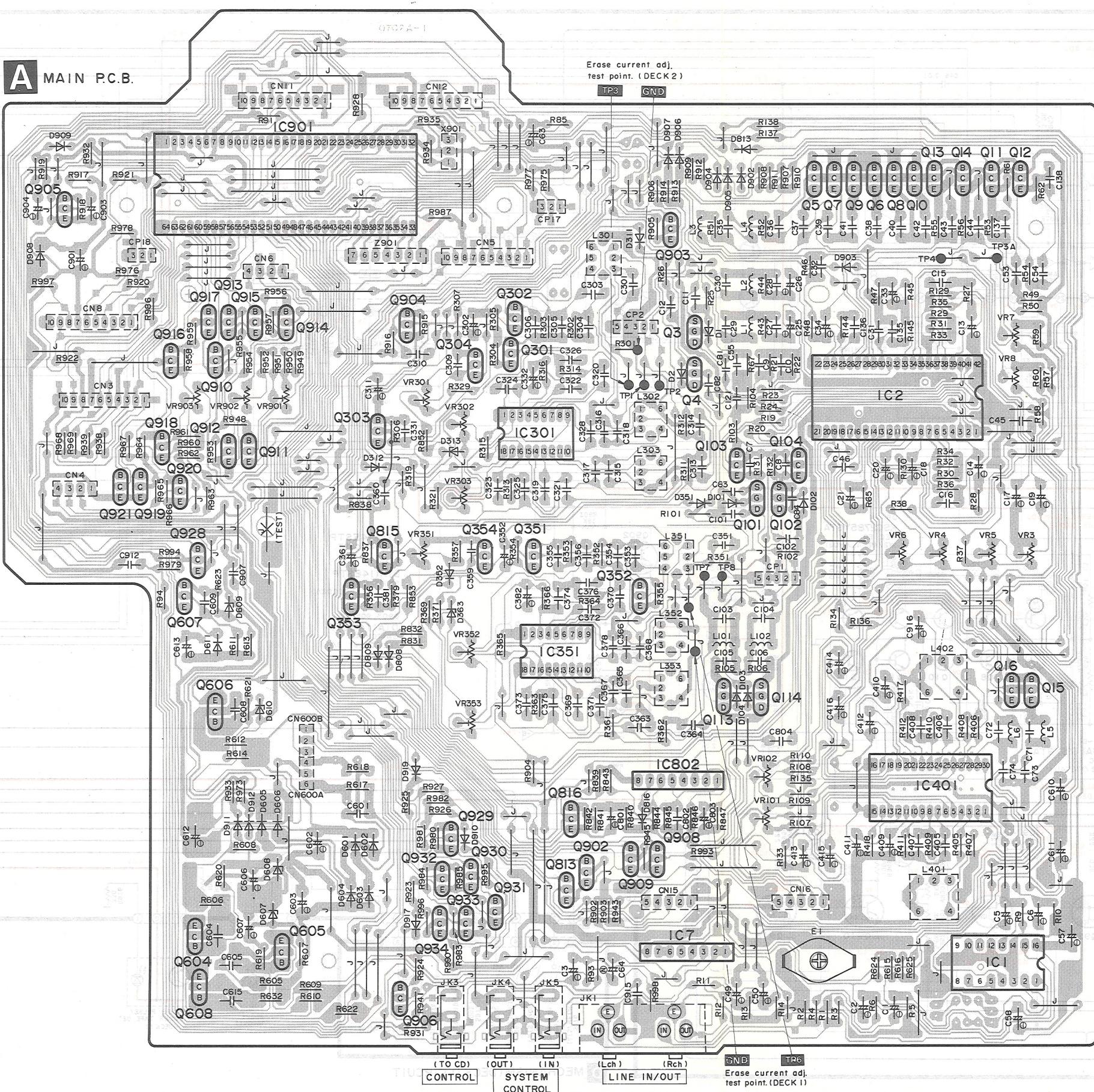
- Pin connection

PIN NO.	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	F2	F2	N15	N12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	P16	P14	P13	N9	G8	G7	G6	G5	G4	G3	G2	G1	N1	F1	F1				

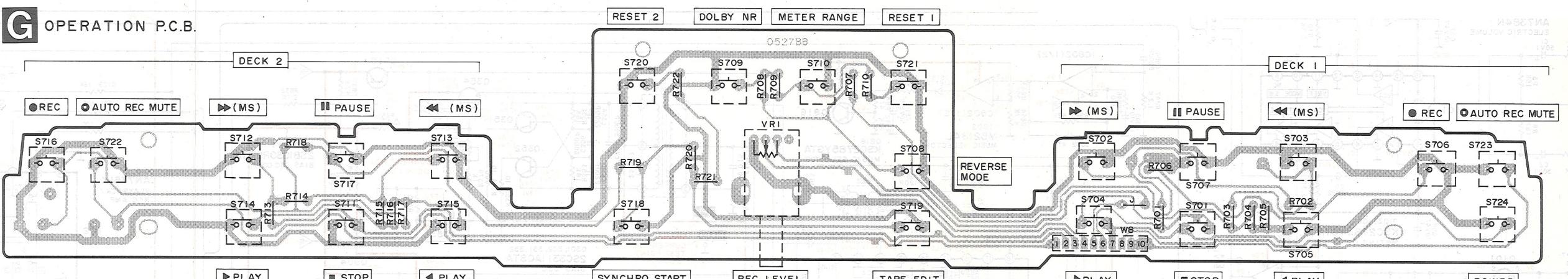
### Note

1) F1, F2 .....Filament 3) NC.....No connection  
2) NP .....No pin 4) 1G~9G.....Grid

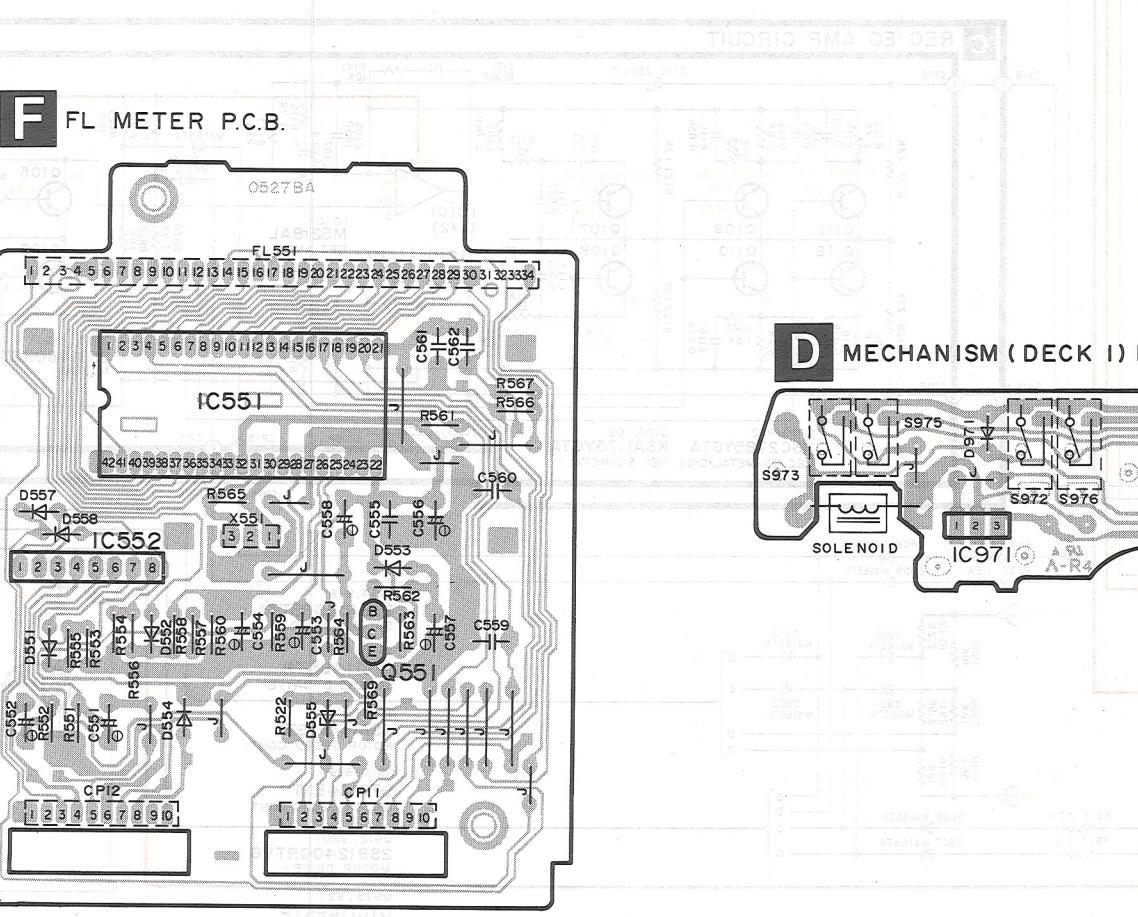
## ■ PRINTED CIRCUIT BOARDS



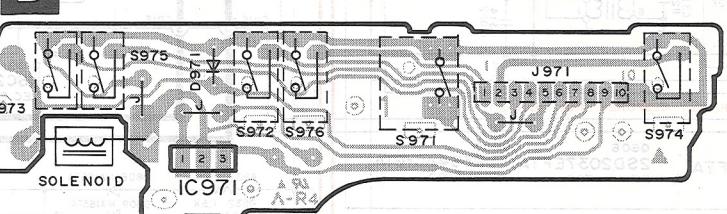
## **G** OPERATION P.C.B.



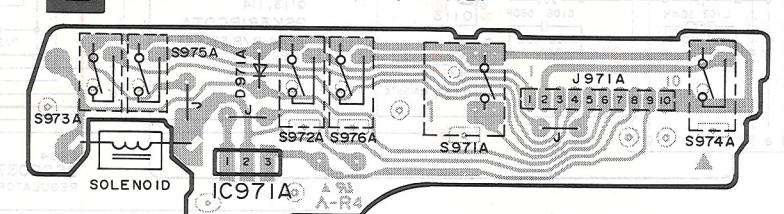
**F** FL METER P.C.B.

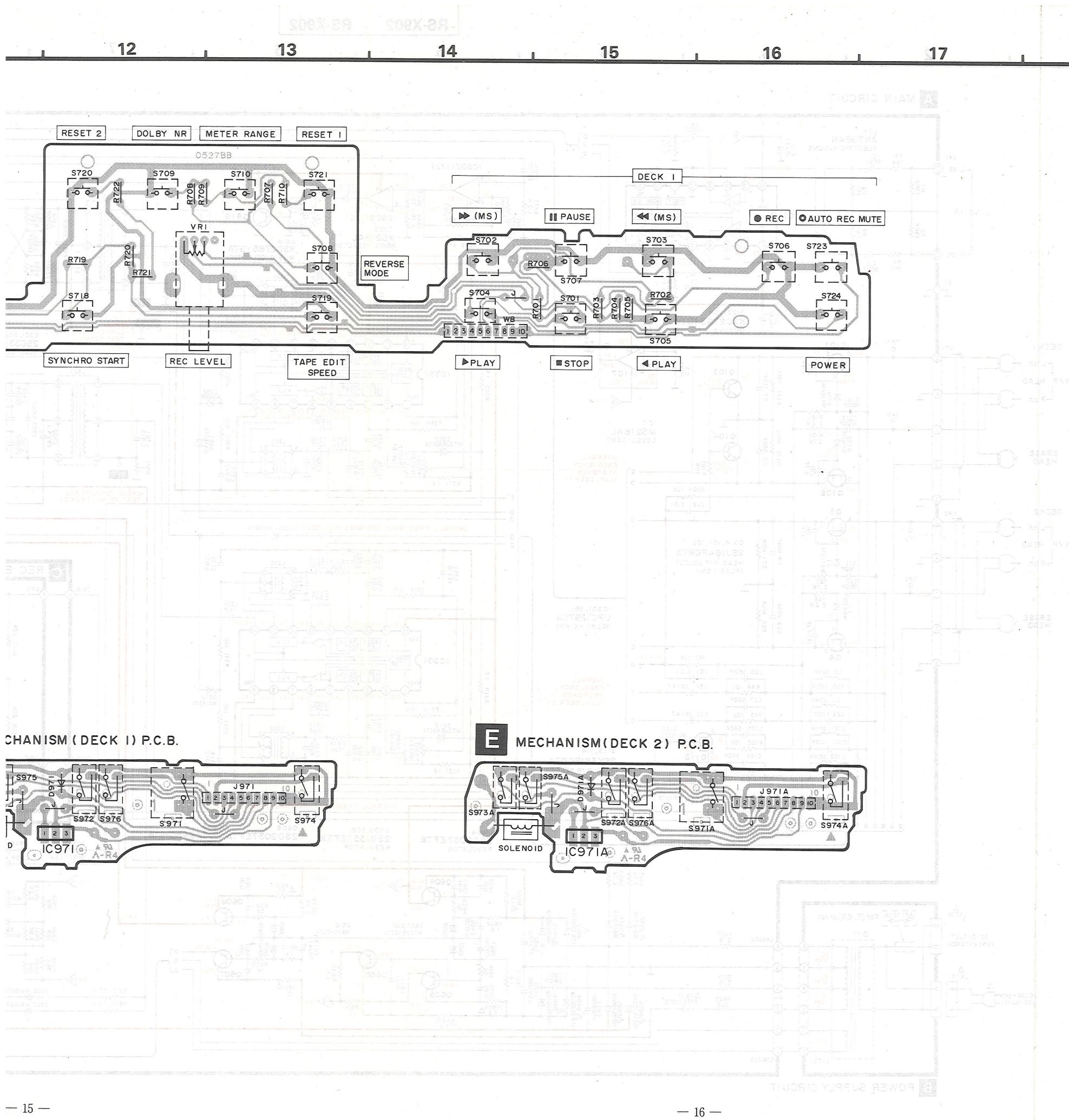


D MECHANISM (DECK 1) P.C.B.

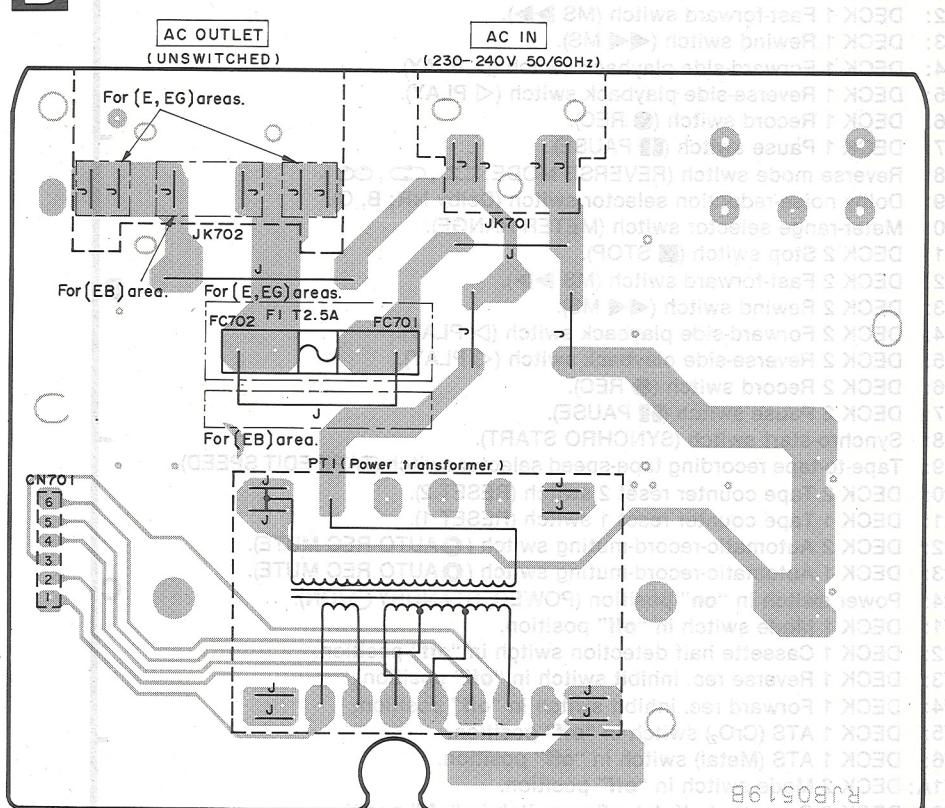


MECHANISM (DECK 2) P.C.B.

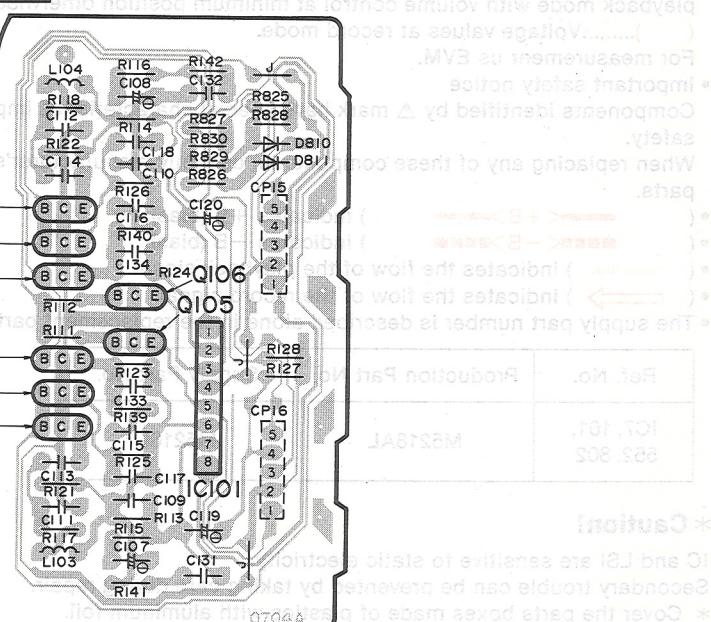




**B** POWER SUPPLY P.C.B.



**REC EQ AMP P.C.B.**



## SCHEMATIC DIAGRAM (Parts list on pages 32~36.)

(This schematic diagram may be modified at any time with development of new technology.)

## Notes:

- S701: DECK 1 Stop switch (■ STOP).
- S702: DECK 1 Fast-forward switch (MS ▶▶).
- S703: DECK 1 Rewind switch (◀◀ MS).
- S704: DECK 1 Forward-side playback switch (▷ PLAY).
- S705: DECK 1 Reverse-side playback switch (◀ PLAY).
- S706: DECK 1 Record switch (● REC).
- S707: DECK 1 Pause switch (■ PAUSE).
- S708: Reverse mode switch (REVERSE MODE; □, □, □).
- S709: Dolby noise-reduction selector switch (Dolby NR; B, C).
- S710: Meter-range selector switch (METER RANGE).
- S711: DECK 2 Stop switch (■ STOP).
- S712: DECK 2 Fast-forward switch (MS ▶▶).
- S713: DECK 2 Rewind switch (◀◀ MS).
- S714: DECK 2 Forward-side playback switch (▷ PLAY).
- S715: DECK 2 Reverse-side playback switch (◀ PLAY).
- S716: DECK 2 Record switch (● REC).
- S717: DECK 2 Pause switch (■ PAUSE).
- S718: Synchro-start switch (SYNCHRO START).
- S719: Tape-to-tape recording tape-speed selector switch (TAPE EDIT SPEED).
- S720: DECK 2 Tape counter reset 2 switch (RESET 2).
- S721: DECK 1 Tape counter reset 1 switch (RESET 1).
- S722: DECK 2 Automatic-record-muting switch (● AUTO REC MUTE).
- S723: DECK 1 Automatic-record-muting switch (● AUTO REC MUTE).
- S724: Power switch in "on" position (POWER, STANDBY □/ON).
- S971: DECK 1 Mode switch in "off" position.
- S972: DECK 1 Cassette half detection switch in "off" position.
- S973: DECK 1 Reverse rec. inhibit switch in "off" position.
- S974: DECK 1 Forward rec. inhibit switch in "off" position.
- S975: DECK 1 ATS ( $\text{Cr}_2\text{O}_3$ ) switch in "off" position.
- S976: DECK 1 ATS (Metal) switch in "off" position.
- S971A: DECK 2 Mode switch in "off" position.
- S972A: DECK 2 Cassette half detection switch in "off" position.
- S973A: DECK 2 Reverse rec. inhibit switch in "off" position.
- S974A: DECK 2 Forward rec. inhibit switch in "off" position.
- S975A: DECK 2 ATS ( $\text{Cr}_2\text{O}_3$ ) switch in "off" position.
- S976A: DECK 2 ATS (Metal) switch in "off" position.
- Resistance are in ohms ( $\Omega$ ), 1/4 watt unless specified otherwise.  $1\text{K}=1,000 (\Omega)$ ,  $1\text{M}=1,000\text{k} (\Omega)$
- Capacity are in micro-farads ( $\mu\text{F}$ ) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified. ( ) ..... Voltage values at record mode.

For measurement us EVM.  
• Important safety notice  
Components identified by  $\Delta$  mark have special characteristics important for safety.

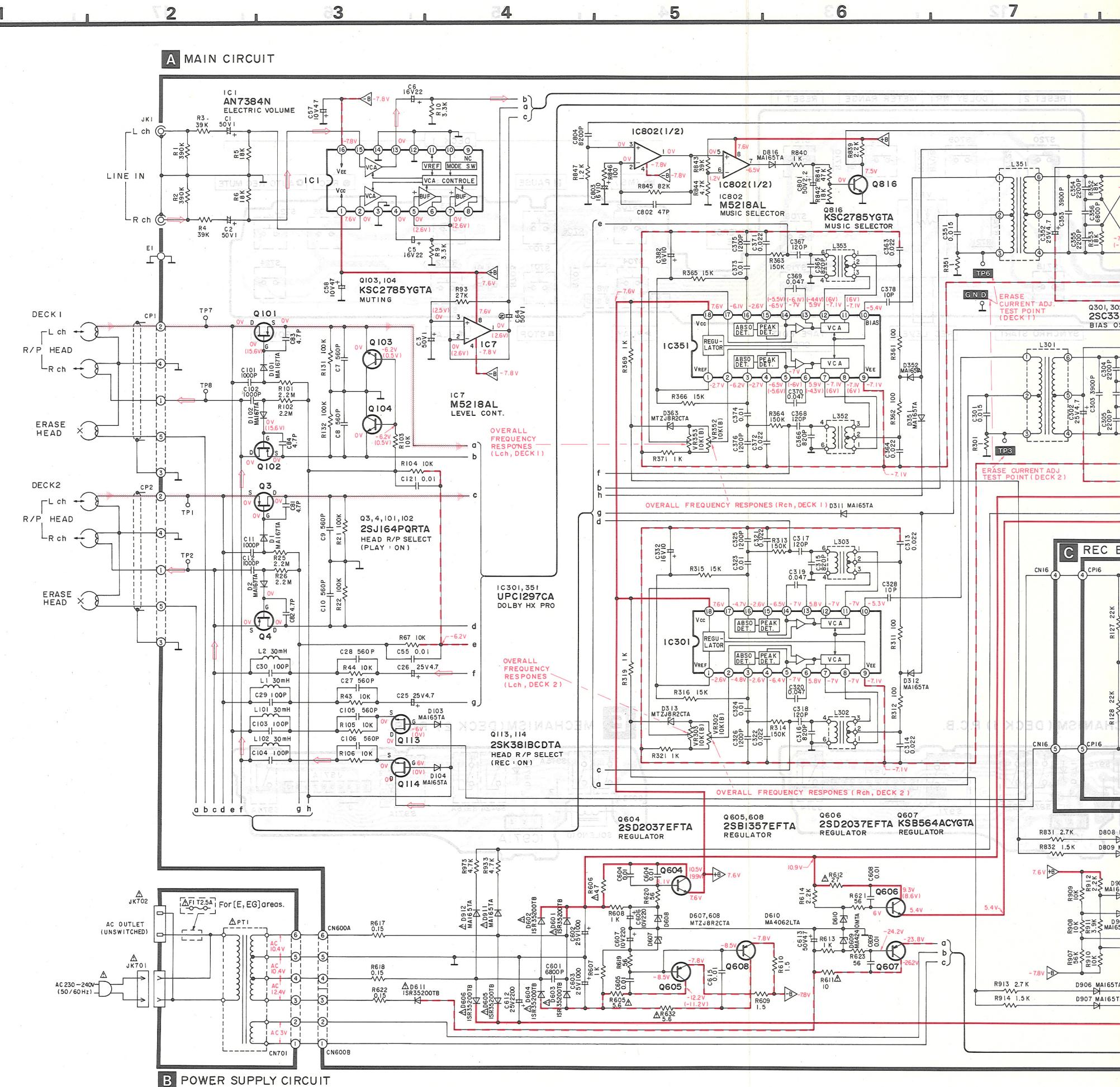
When replacing any of these components, use only manufacturer's specified parts.

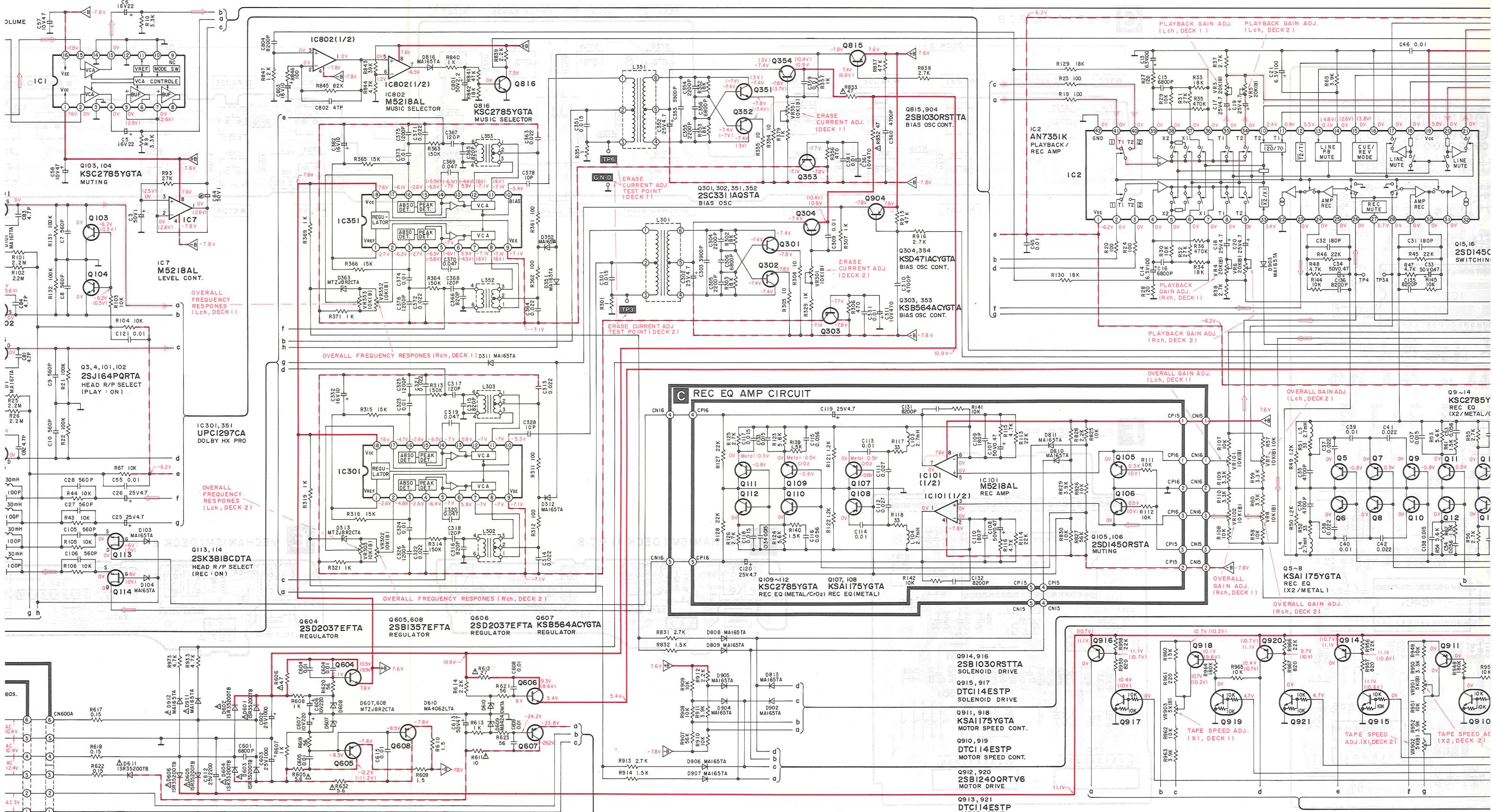
- (  $\text{---} +\text{B} \text{---}$  ) indicates  $+\text{B}$  (bias).
- (  $\text{---} -\text{B} \text{---}$  ) indicates  $-\text{B}$  (bias).
- (  $\text{---} \text{---} \text{---}$  ) indicates the flow of the playback signal.
- (  $\text{---} \text{---} \text{---}$  ) indicates the flow of the record signal.
- The supply part number is described alone in the replacement parts list.

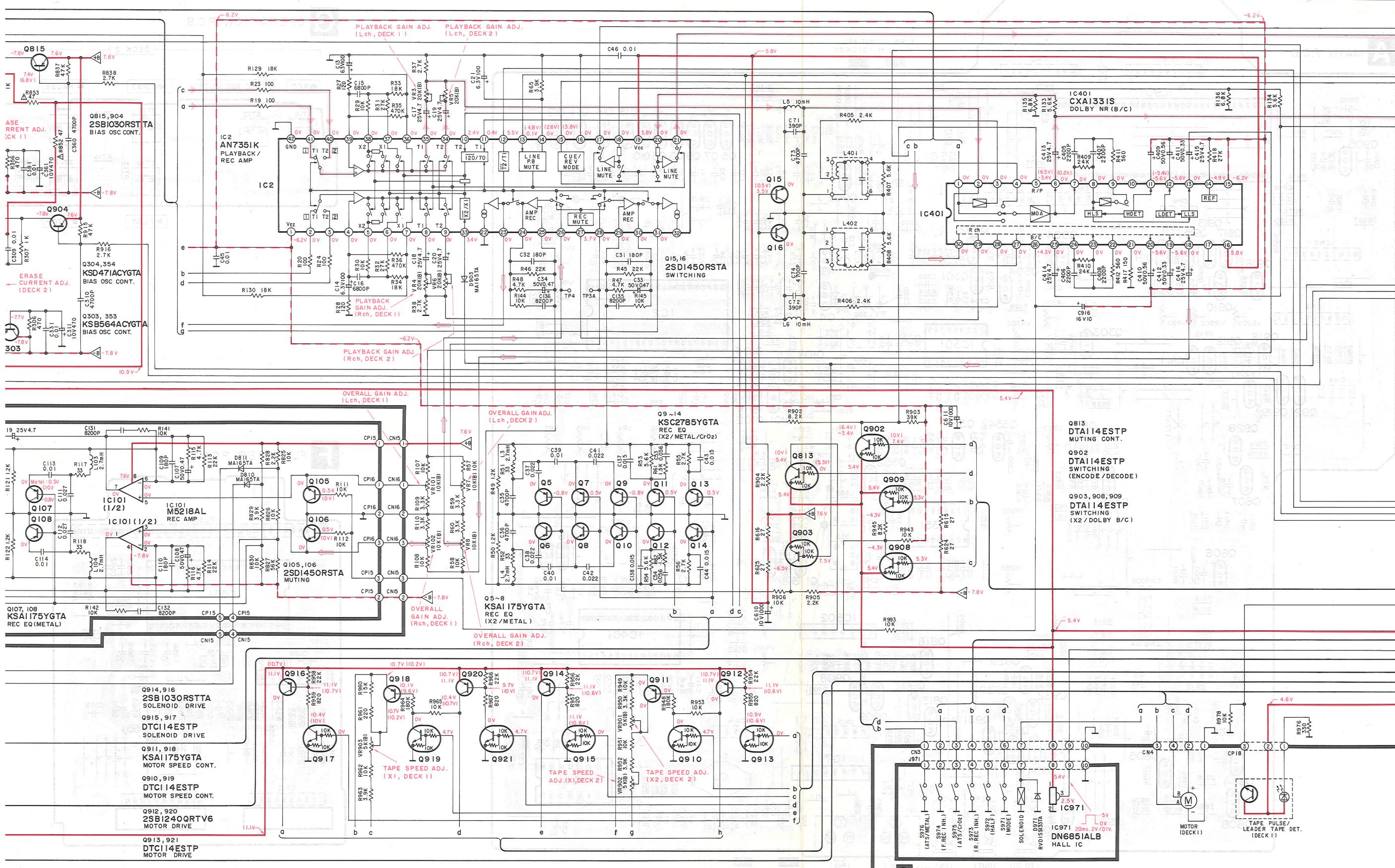
Ref. No.	Production Part No.	Supply Part No.
IC7, 101, 552, 802	M5218AL	M5218L

## \* Caution!

IC and LSI are sensitive to static electricity.  
Secondary trouble can be prevented by taking care during repair.  
\* Cover the parts boxes made of plastics with aluminum foil.  
\* Ground the soldering iron.  
\* Put a conductive mat on the work table.  
\* Do not touch the legs of IC or LSI with the fingers directly.

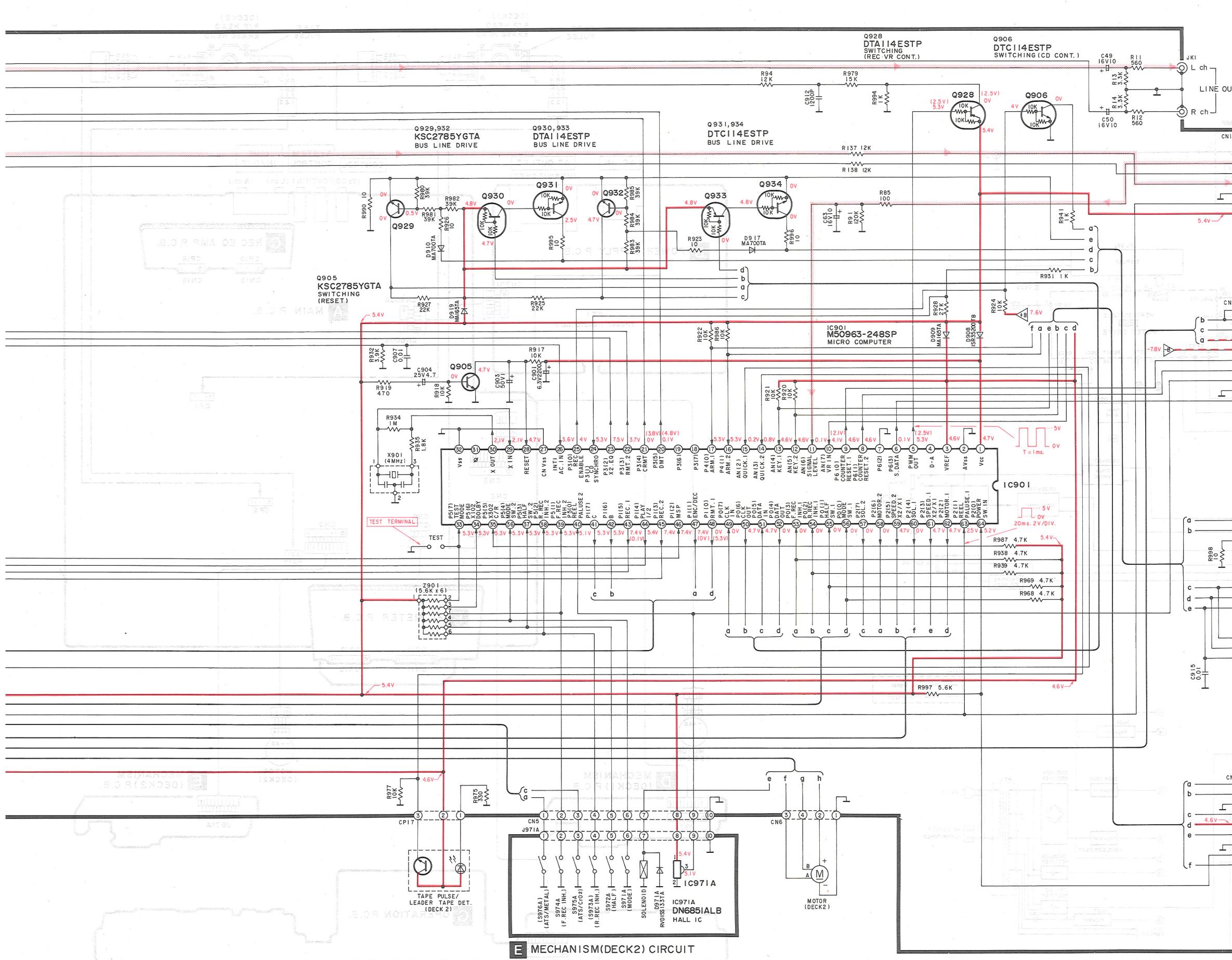




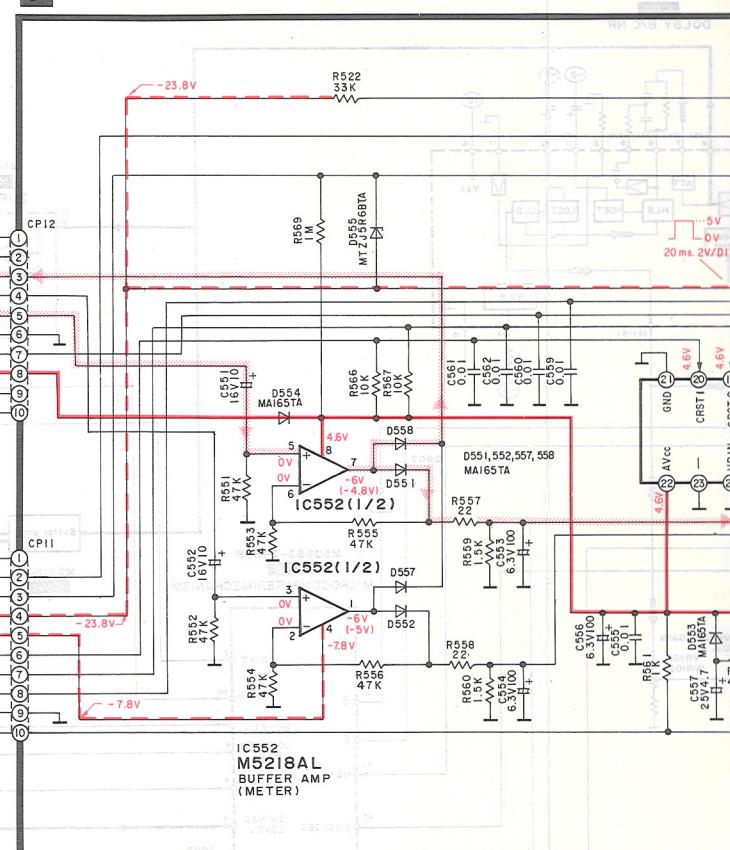


D MECHANISM (DECK1) CIRCUIT

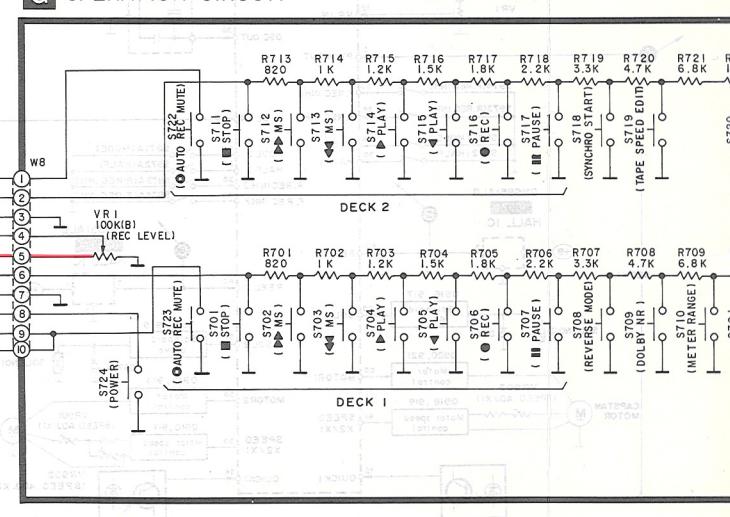
IMAGE COMMUNICATIONS DIAGRAM



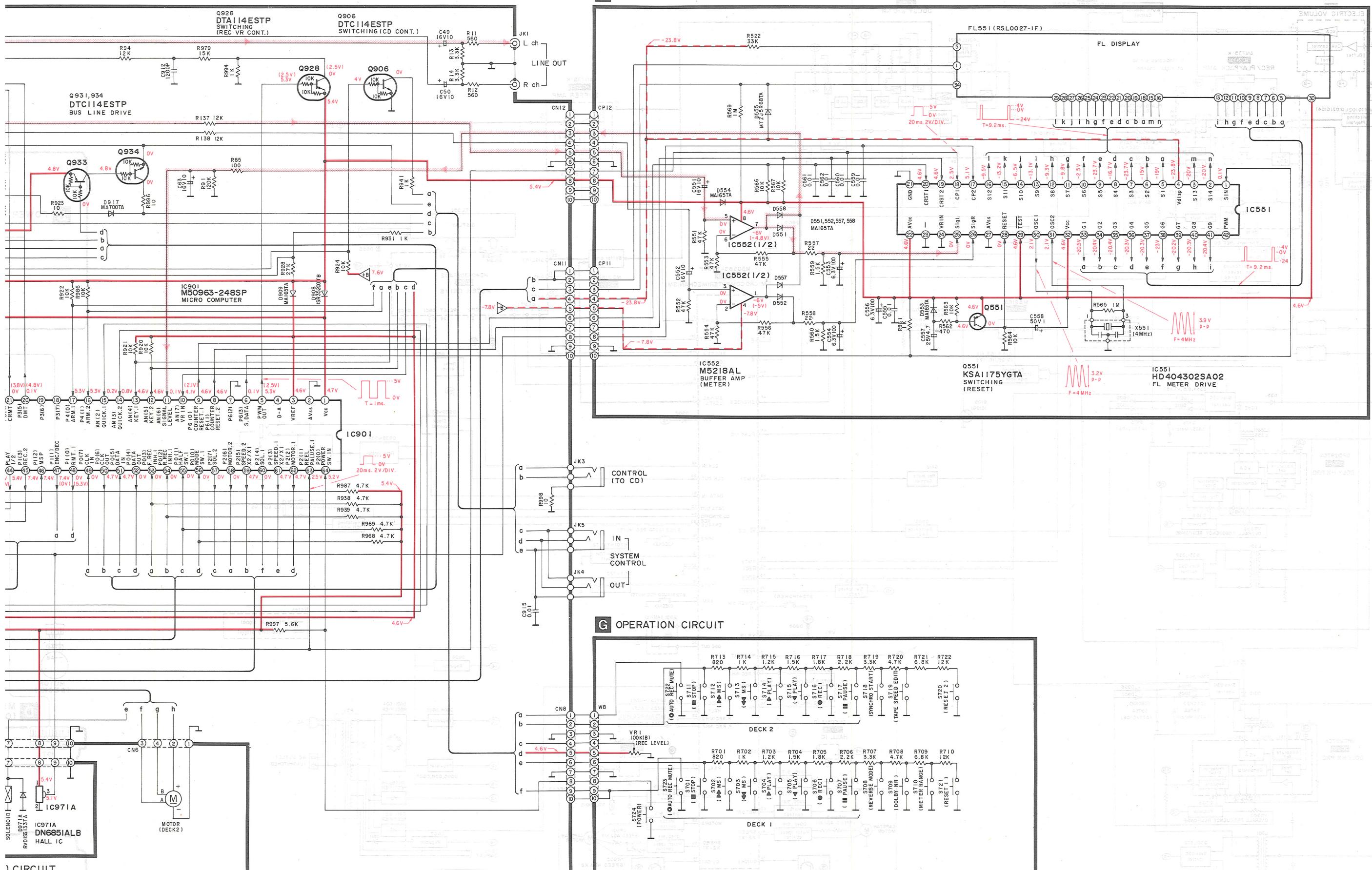
## **F** FL METER CIRCUIT



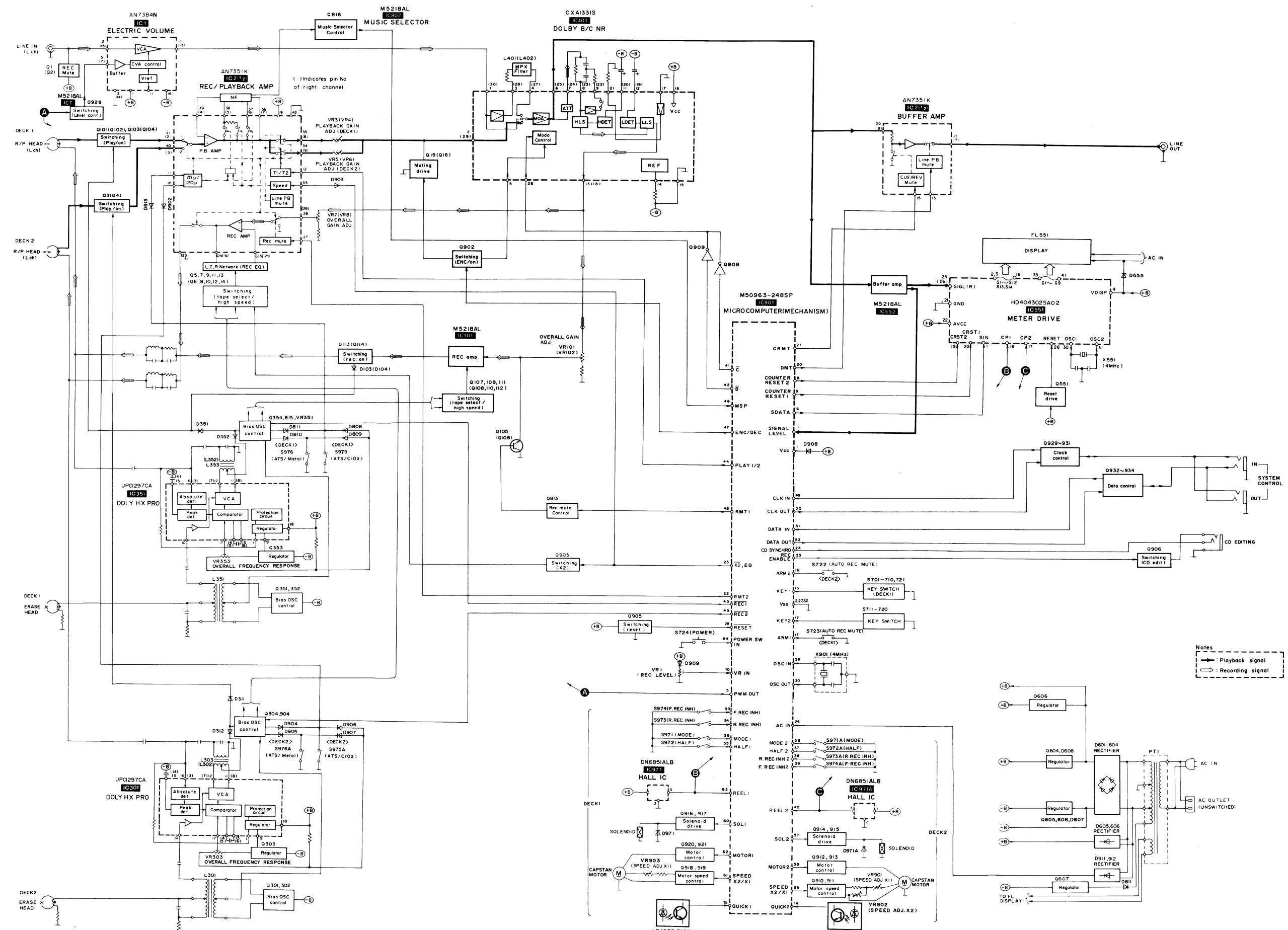
G OPERATION CIRCUIT



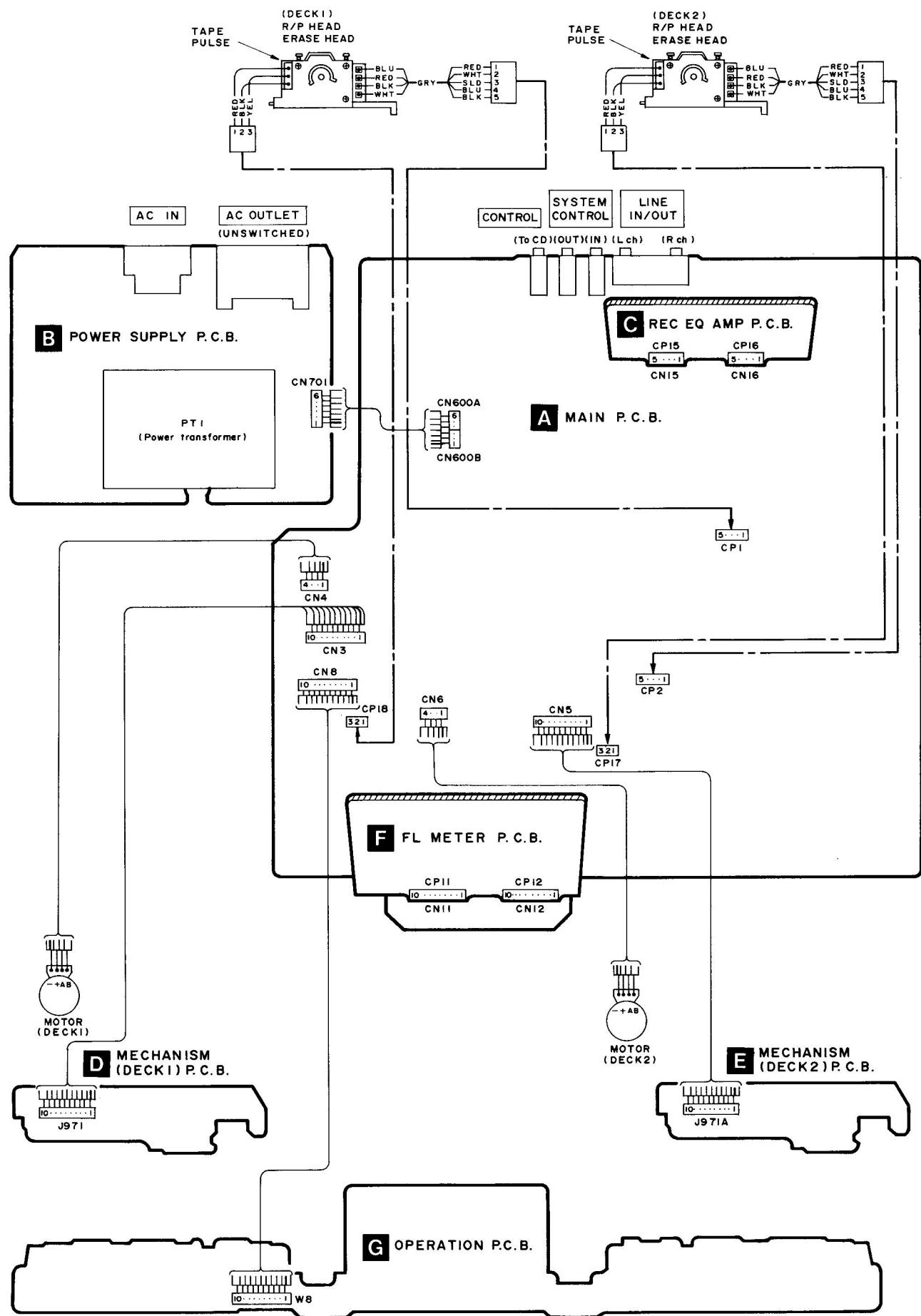
## F FL METER CIRC



## ■ BLOCK DIAGRAM



## ■ WIRING CONNECTION DIAGRAM



## ■ TERMINAL FUNCTION OF IC'S

- IC901 (M50963-248SP): MICROCOMPUTER (This microcomputer is used for mechanical operation.)

Pin No.	Mark	I/O Division	Function
1	V <sub>CC</sub>	I	Power supply terminal
2	A <sub>VSS</sub> (GND)	—	GND terminal
3	V <sub>REF</sub>	I	Reference voltage terminal
4	D-A	—	Not used, open
5	PWM	O	Pulse width modulated signal
6	P6 (3)	O	Serial signal for FL display
7	P6 (2)	—	Not used, open
8	P6 (1)	O	Counter reset signal of deck 2 ("RESET": "L", others: "H")
9	P6 (0)	O	Counter reset signal of deck 1 ("RESET": "L", others: "H")
10	AN (7)	I	Variable voltage level signal of rec. level volume
11	AN (6)	I	Peak voltage terminal of rec. signal
12	AN (5)	I	Operation key switches Deck 2: STOP, F.F./REW, PLAY, REC, PAUSE, SYNCHRO START, X1/X2, counter reset
13	AN (4)	I	Operation key switches Deck 1: STOP, F.F./REW, F. PLAY, R. PLAY, REC, PAUSE, Reverse-mode, Dolby B/C, Meter-range, counter reset
14	AN (3)	I	Leader tape det. signal of deck 2
15	AN (2)	I	Leader tape det. signal of deck 1
16	P4 (1)	I	"AUTO REC MUTE" key switch signal of deck 2 ("ON": "L", "OFF": "H")
17	P4 (0)	I	"AUTO REC MUTE" key switch signal of deck 1 ("ON": "L", "OFF": "H")
18	P3 (7)	—	Not used
19	P3 (6)	—	Not used
20	P3 (5)	O	Mute signal of line out (Mute "ON": "H", Mute "OFF": "L")
21	P3 (4)	O	Mute signal with Cue/Review action (Mute "ON": "H", Mute "OFF": "L")
22	P3 (3)	O	Rec. mute signal of deck 2 (Mute "ON": "H", Mute "OFF": "L")

Pin No.	Mark	I/O Division	Function
23	P3 (2)	O	Playback equalizer select signal with tape edit of deck 1 (Normal: "H", X2 edit: "L")
24	P3 (1)	I	CD Synchro rec. signal (CD STOP: "H", CD PLAY: "L")
25	P3 (0)	O	CD Synchro rec. possible/impossible signal (possible: "L", impossible: "H")
26	INTI	I	"AC POWER OFF" det. terminal
27	C <sub>VSS</sub>	—	GND terminal
28	RESET	I	Reset signal ("L"=RESET, Normal: "H")
29	X <sub>IN</sub>	I	Clock OSC terminal
30	X <sub>OUT</sub>	O	
31	φ	—	Not used, open
32	V <sub>SS</sub>	—	GND terminal
33	P5 (7)	I	Test terminal (Normal="H")
34	P5 (6)	I	Model select (Normal: "H")
35	P5 (5)	I	Model select (Normal: "H")
36	P5 (4)	I	Mechanism mode switch ("ON": "L", "OFF": "H")
37	P5 (3)	I	Cassette half det. switch ("ON": "L", "OFF": "H")
38	P5 (2)	I	Reverse rec. inh. switch of deck 2 ("ON": "L", "OFF": "H")
39	P5 (1)	I	Forward rec. inh. switch of deck 2 ("ON": "L", "OFF": "H")
40	P5 (0)	I	Reel rotation pulse signal of deck 2
41	P1 (7)	O	Dolby C "ON/OFF" select signal ("ON": "L", "OFF": "H")
42	P1 (6)	O	Dolby B "ON/OFF" select signal ("ON": "L", "OFF": "H")
43	P1 (5)	O	Bias OSC "ON/OFF" select signal ("ON": "L", "OFF": "H")
44	P1 (4)	O	Playback amp. select signal (Deck 2-P.B: "L", others: "H")
45	P1 (3)	O	Bias OSC "ON/OFF" select signal ("ON": "L", "OFF": "H")
46	P1 (2)	I	Playback signal det. output signal ("ON": "L", "OFF": "H")

Pin No.	Mark	I/O Division	Function
47	P1 (1)	O	Dolby circuit encord/decord select signal (encord: "L", decord: "H")
48	P1 (0)	O	Rec. mute signal of deck 2 (Mute "ON": "H", Mute "OFF": "L")
49	P0 (7)	I	Bus clock signal
50	P0 (6)	O	
51	P0 (5)	I	Bus data signal
52	P0 (4)	O	
53	P0 (3)	I	Forward rec. inh. switch of deck 1 ("ON": "L", "OFF": "H")
54	P0 (2)	I	Reverse rec. inh. switch of deck 1 ("ON": "L", "OFF": "H")
55	P0 (1)	I	Cassette-half det. switch of deck 1 ("ON": "L", "OFF": "H")
56	P0 (0)	I	Mechanism mode-switch of deck 1 ("ON": "L", "OFF": "H")
57	P2 (7)	O	Mechanism plunger "ON/OFF" select signal of deck 2 ("ON": "H", "OFF": "L")

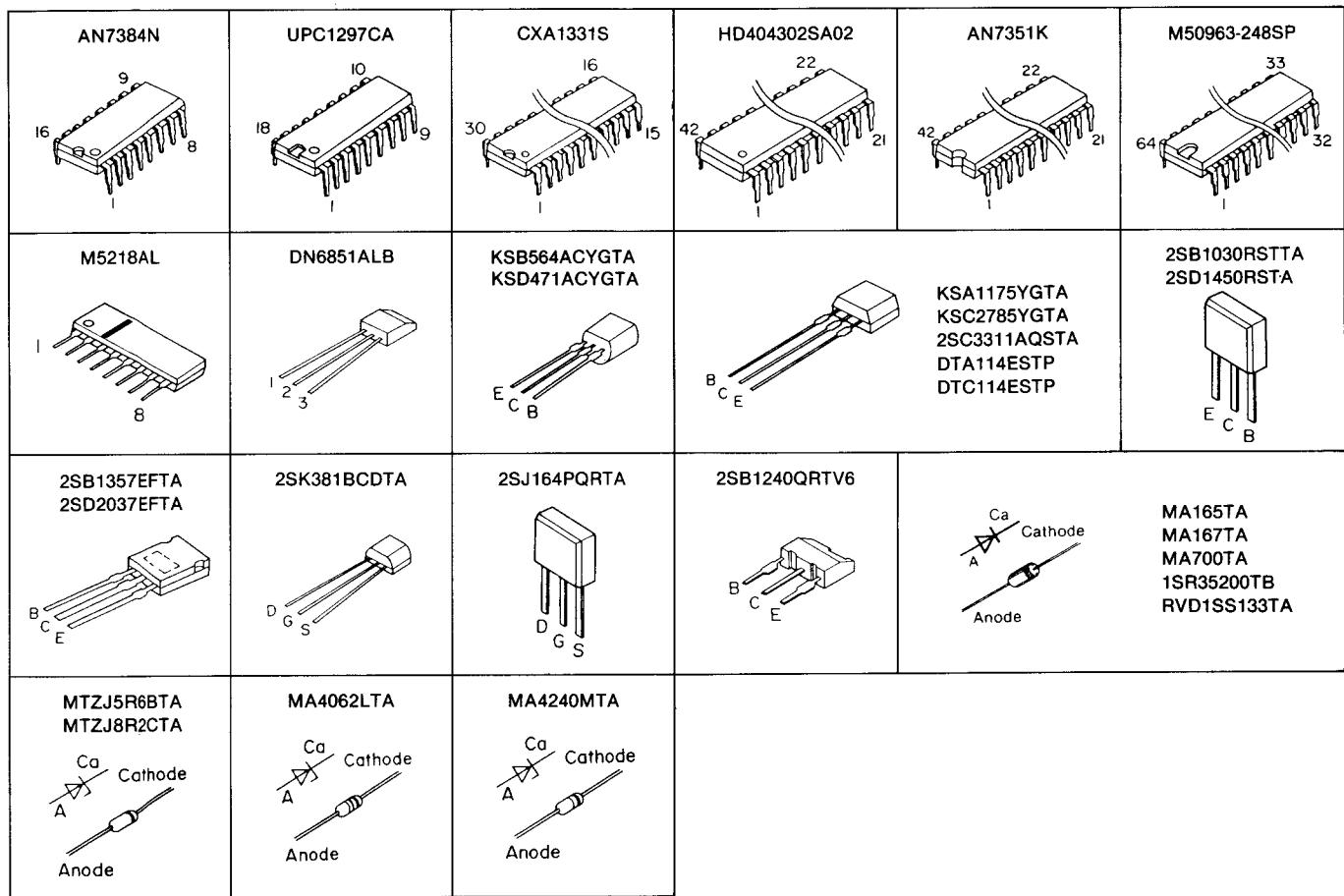
Pin No.	Mark	I/O Division	Function
58	P2 (6)	O	Mechanism motor "ON/OFF" select signal of deck 2 ("ON": "H", "OFF": "L")
59	P2 (5)	O	Mechanism motor speed select signal of deck 2 ("X1": "H", "X2": "L")
60	P2 (4)	O	Mechanism plunger "ON/OFF" select signal of deck 1 ("ON": "H", "OFF": "L")
61	P2 (3)	O	Mechanism motor speed select signal of deck 1 ("X1": "H", "X2": "L")
62	P2 (2)	O	Mechanism motor "ON/OFF" select signal of deck 1 ("ON": "H", "OFF": "L")
63	P2 (1)	I	Mechanism reel rotation pulse signal of deck 1
64	P2 (0)	I	Power switch ("ON": "L", "OFF": "H")

• IC551 (HD404302SA02): MICROCOMPUTER (This microcomputer is used for FL meter operation.)

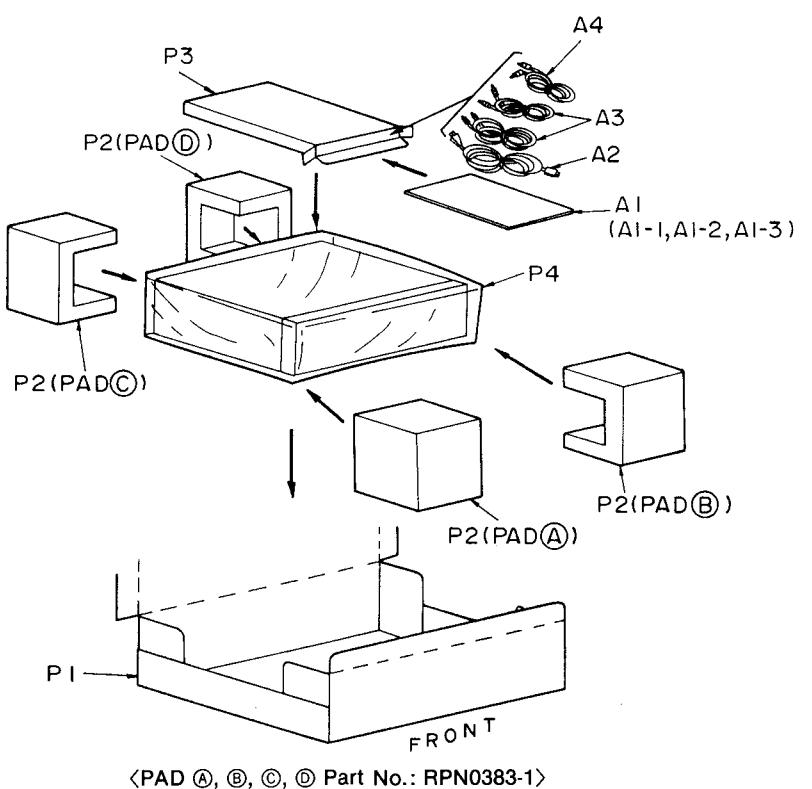
Pin No.	Mark	I/O Division	Function
1	SIN	I	Serial data signal
2 3 5 16	S1 S14	O	Segment signal for FL display
4	V disp	I	Pull down power supply terminal ( $-V_{cc}$ )
17	CP2	I	Peel pulse signal of deck 2
18	CP1		
19	CRST2	I	Tape counter reset terminal of deck 2
20	CRST1	I	Tape counter reset terminal of deck 1
21	GND	—	GND terminal
22	AVCC	I	Power supply terminal

Pin No.	Mark	I/O Division	Function
23	—	—	—
24	VRIN	—	Rec level control signal
25	SIGL	I	Lch level signal
26	SIGR	I	Rch level signal
27	AVSS	—	GND terminal
28	RESET	I	Reset terminal ("RESET": "H")
29	TEST	I	Test terminal
30	OSC1	O	Clock OSC terminal (4MHz)
31	OSC2	I	
32	VCC	I	Power supply terminal
33 41	G1 G9	O	Grid signal for FL display
42	PWM	—	Not used, open

## ■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES



## ■ PACKING



## ■ REPLACEMENT PARTS LIST

Notes : \* Important safety notice:  
 Components identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.  
 \* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)  
 Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks
Q906	DTC114ESTP	TRANSISTOR	
Q908, 909	DTA114ESTP	TRANSISTOR	
Q910	DTC114ESTP	TRANSISTOR	
Q911	KSA1175YGT	TRANSISTOR	
Q912	2SB1240-P	TRANSISTOR	
Q913	DTC114ESTP	TRANSISTOR	
Q914	2SB1030QTA	TRANSISTOR	
Q915	DTC114ESTP	TRANSISTOR	
Q916	2SB1030QTA	TRANSISTOR	
Q917	DTC114ESTP	TRANSISTOR	
Q918	KSA1175YGT	TRANSISTOR	
Q919	DTC114ESTP	TRANSISTOR	
Q920	2SB1240-P	TRANSISTOR	
Q921	DTC114ESTP	TRANSISTOR	
Q928	DTA114ESTP	TRANSISTOR	
Q929	KSC2785YGT	TRANSISTOR	
Q930	DTA114ESTP	TRANSISTOR	
Q931	DTC114ESTP	TRANSISTOR	
Q932	KSC2785YGT	TRANSISTOR	
Q933	DTA114ESTP	TRANSISTOR	
Q934	DTC114ESTP	TRANSISTOR	
		DIODE(S)	
D1, 2	MA167	DIODE	
D101, 102	MA167	DIODE	
D103, 104	MA165	DIODE	
D311, 312	MA165	DIODE	
D313	MTZJ8R2CTA	DIODE	
D351, 352	MA165	DIODE	
D363	MTZJ8R2CTA	DIODE	
D551-554	MA165	DIODE	
D555	MTZJ5R6BTA	DIODE	
D557, 558	MA165	DIODE	
D601-606	1SR35200TB	DIODE	$\Delta$
D607, 608	MTZJ8R2CTA	DIODE	
D609	MA4240H	DIODE	
D610	MA4062	DIODE	
D611	1SR35200TB	DIODE	$\Delta$
D808-811	MA165	DIODE	
D813	MA165	DIODE	
D816	MA165	DIODE	
D902-907	MA165	DIODE	
D908	1SR35200TB	DIODE	
D909	MA165	DIODE	
D910	MA700TA	DIODE	
D911, 912	MA165	DIODE	$\Delta$

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
D917	MA700TA	DIODE		S701	EVQ21405R	STOP(DECK1)	
D919	MA165	DIODE		S702	EVQ21405R	F. F. (DECK1)	
D971	RVD1SS133TA	DIODE(DECK1)		S703	EVQ21405R	REW. (DECK1)	
D971A	RVD1SS133TA	DIODE(DECK2)		S704	EVQ21405R	F. PLAYBACK(DECK1)	
		VARIABLE RESISTOR(S)		S705	EVQ21405R	R. PLAYBACK(DECK1)	
VR1	EVJ02FF01B15	REC LEVEL CONTROL		S706	EVQ21405R	REC(DECK1)	
VR3-6	EVNDXAA00B24	PLAYBACK GAIN ADJ.		S707	EVQ21405R	PAUSE(DECK1)	
VR7, 8	EVNDXAA00B14	OVERALL GAIN ADJ. (DECK2)		S708	EVQ21405R	REVERSE MODE	
VR101, 102	EVNDXAA00B14	OVERALL GAIN ADJ. (DECK1)		S709	EVQ21405R	DOLBY NR	
VR301	EVNDXAA00B14	ERASE CURRENT ADJ. (DECK2)		S710	EVQ21405R	METER RANGE	
VR302, 303	EVNDXAA00B14	OVERALL FREQ. ADJ. (DECK2)		S711	EVQ21405R	STOP(DECK2)	
VR351	EVNDXAA00B14	ERASE CURRENT ADJ. (DECK1)		S712	EVQ21405R	F. F. (DECK2)	
VR352, 353	EVNDXAA00B14	OVERALL FREQ. ADJ. (DECK1)		S713	EVQ21405R	REW. (DECK2)	
VR901-903	EVNDXAA00B53	TAPE SPEED ADJ.		S714	EVQ21405R	F. PLAYBACK(DECK2)	
				S715	EVQ21405R	R. PLAYBACK(DECK2)	
		COMPONENT COMBINATION(S)		S716	EVQ21405R	REC(DECK2)	
				S717	EVQ21405R	PAUSE(DECK2)	
				S718	EVQ21405R	SYNCHRO START	
Z901	EXBF7E562JYV	COMBINATION PART (5.6kX6)		S719	EVQ21405R	TAPE EDIT SPEED (X1/X2)	
				S720	EVQ21405R	COUNTER RESET2 (DECK2)	
		COIL (S)		S721	EVQ21405R	COUNTER RESET1 (DECK1)	
				S722	EVQ21405R	AUTO REC MUTE (DECK2)	
L1, 2	SLQX303-1KT	COIL		S723	EVQ21405R	AUTO REC MUTE (DECK1)	
L3, 4	SLQX272-1YT	COIL		S724	EVQ21405R	POWER	
L5, 6	RLQB103JT-Y	COIL		S971	RSH1A89ZB-U	MODE(DECK1)	
L101, 102	SLQX303-1KT	COIL		S972	RSH1A90YB-U	HALF(DECK1)	
L103, 104	SLQX272-1YT	COIL		S973	RSH1A90YB-U	R. REC INH (DECK1)	
L301	SL09B4-K	COIL		S974	RSH1A90YB-U	F. REC INH (DECK1)	
L302, 303	SL09B1-Z	COIL		S975	RSH1A90YB-U	ATS(DECK1)	
L351	SL09B4-K	COIL		S976	RSH1A90YB-U	ATS(DECK1)	
L352, 353	SL09B1-Z	COIL		S971A	RSH1A89ZB-U	MODE(DECK2)	
L401, 402	QLM9210K	COIL		S972A	RSH1A90YB-U	HALF(DECK2)	
				S973A	RSH1A90YB-U	R. REC INH (DECK2)	
		TRANSFORMER(S)		S974A	RSH1A90YB-U	F. REC INH (DECK2)	
				S975A	RSH1A90YB-U	ATS(DECK2)	
PT1	RTP1K4B013	POWER TRANSFORMER	△	S976A	RSH1A90YB-U	ATS(DECK2)	
						CONNECTOR(S) AND SOCKET(S)	
		OSCILLATOR(S)		CN3	SJSD1005	CONNECTOR(10P)	
X551	EFOG4004A4	CERAMIC FILTER (4MHz)		CN4	RJS1A1704	CONNECTOR(4P)	
X901	EFOG4004A4	CERAMIC FILTER (4MHz)		CN5	SJSD1005	CONNECTOR(10P)	
		DISPLAY TUBE		CN6	RJS1A1704	CONNECTOR(4P)	
				CN8	SJSD1005	CONNECTOR(10P)	
FL551	RSL0027-1F	DISPLAY TUBE		CN11, 12	RJU003K010M1	SOCKET(10P)	
				CN15, 16	RJU060G05T	SOCKET(5P)	
		FUSE (S)		CN600A	RJS1A1703	CONNECTOR(3P)	
				CN600B	RJS1A1703	CONNECTOR(3P)	
F1	XBA2C5TB0	FUSE 250V T2.5A	△	CN701	SJT30643-V	CONNECTOR(6P)	
				CP1, 2	RJP5G18ZA	CONNECTOR(5P)	
		SWITCH(ES)		CP11, 12	RJT003K010M1	CONNECTOR(10P)	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
CP15, 16	RJT060R05	CONNECTOR(5P)		CP17, 18	SJTD313	CONNECTOR(3P)	
						JACK(S)	
JK1	SJF3069-2N	TERMINAL BOARD		JK3-5	RJJ33T01	M3 JACK	
JK701	SJS9236	AC INLET	△	JK702	RJS1A4802-B	AC OUTLET	(EB) △
JK702	RJS1A4902-B	AC OUTLET	(E, EG) △			GND PART(S)	
E1	SNE1004-1	GND PLATE					

## ■ RESISTORS & CAPACITORS

Notes : \* Capacity value are in microfarads (uF) unless specified otherwise, P=Picofarads (pF) F=Farads (F)  
 \* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R61, 62	ERDS2TJ152	1/4W 1.5K	R65	ERDS2TJ392T	1/4W 3.9K	R304, 305	ERDS2TJ100	1/4W 10
		RESISTORS	R67	ERDS2TJ103	1/4W 10K	R306	ERDS2TJ471	1/4W 470
R1, 2	ERDS2TJ394	1/4W 390K	R85	ERDS2TJ101	1/4W 100	R307	ERDS2TJ102	1/4W 1K
R3, 4	ERDS2TJ393	1/4W 39K	R91	ERDS2TJ124T	1/4W 120K	R311, 312	ERDS2TJ101	1/4W 100
R5, 6	ERDS2TJ183T	1/4W 18K	R93	ERDS2TJ273	1/4W 27K	R313, 314	ERDS2TJ154	1/4W 150K
R9, 10	ERDS2TJ332	1/4W 3.3K	R94	ERDS2TJ123	1/4W 12K	R315, 316	ERDS2TJ153	1/4W 15K
R11, 12	ERDS2TJ561	1/4W 560	R101, 102	ERDS2TJ225	1/4W 2.2M	R319	ERDS2TJ102	1/4W 1K
R13, 14	ERDS2TJ332	1/4W 3.3K	R103-108	ERDS2TJ103	1/4W 10K	R321	ERDS2TJ102	1/4W 1K
R19, 20	ERDS2TJ101	1/4W 100	R109, 110	ERDS2TJ332	1/4W 3.3K	R328	ERDS2TJ102	1/4W 1K
R21, 22	ERDS2TJ104	1/4W 100K	R111, 112	ERDS2TJ103	1/4W 10K	R351	ERDS2TJ1R0	1/4W 1.0
R23, 24	ERDS2TJ101	1/4W 100	R113, 114	ERDS2TJ223	1/4W 22K	R352, 353	ERDS2TJ183T	1/4W 18K
R25, 26	ERDS2TJ225	1/4W 2.2M	R115, 116	ERDS2TJ472	1/4W 4.7K	R354, 355	ERDS2TJ100	1/4W 10
R27, 28	ERDS2EJ121	1/4W 120	R117, 118	ERDS2TJ330	1/4W 33	R356	ERDS2TJ471	1/4W 470
R29, 30	ERDS2TJ103	1/4W 10K	R121, 122	ERDS2TJ122	1/4W 1.2K	R357	ERDS2TJ102	1/4W 1K
R31, 32	ERDS2TJ273	1/4W 27K	R123, 124	ERDS2TJ562	1/4W 5.6K	R361, 362	ERDS2TJ101	1/4W 100
R33, 34	ERDS2TJ183T	1/4W 18K	R125, 126	ERDS2TJ272T	1/4W 2.7K	R363, 364	ERDS2TJ154	1/4W 150K
R35, 36	ERDS2TJ474	1/4W 470K	R127, 128	ERDS2TJ223	1/4W 22K	R365, 366	ERDS2TJ153	1/4W 15K
R37, 38	ERDS2TJ272T	1/4W 2.7K	R129, 130	ERDS2TJ183T	1/4W 18K	R369	ERDS2TJ102	1/4W 1K
R43, 44	ERDS2TJ103	1/4W 10K	R131, 132	ERDS2TJ104	1/4W 100K	R371	ERDS2TJ102	1/4W 1K
R45, 46	ERDS2TJ223	1/4W 22K	R133, 134	ERDS2TJ562	1/4W 5.6K	R379	ERDS2TJ102	1/4W 1K
R47, 48	ERDS2TJ472	1/4W 4.7K	R135, 136	ERDS2TJ682T	1/4W 6.8K	R405, 406	ERDS2TJ242	1/4W 2.4K
R49, 50	ERDS2TJ122	1/4W 1.2K	R137, 138	ERDS2TJ123	1/4W 12K	R407, 408	ERDS2TJ562	1/4W 5.6K
R51, 52	ERDS2TJ330	1/4W 33	R139, 140	ERDS2TJ152	1/4W 1.5K	R409, 410	ERDS2TJ243T	1/4W 24K
R53, 54	ERDS2TJ562	1/4W 5.6K	R141, 142	ERDS2TJ103				

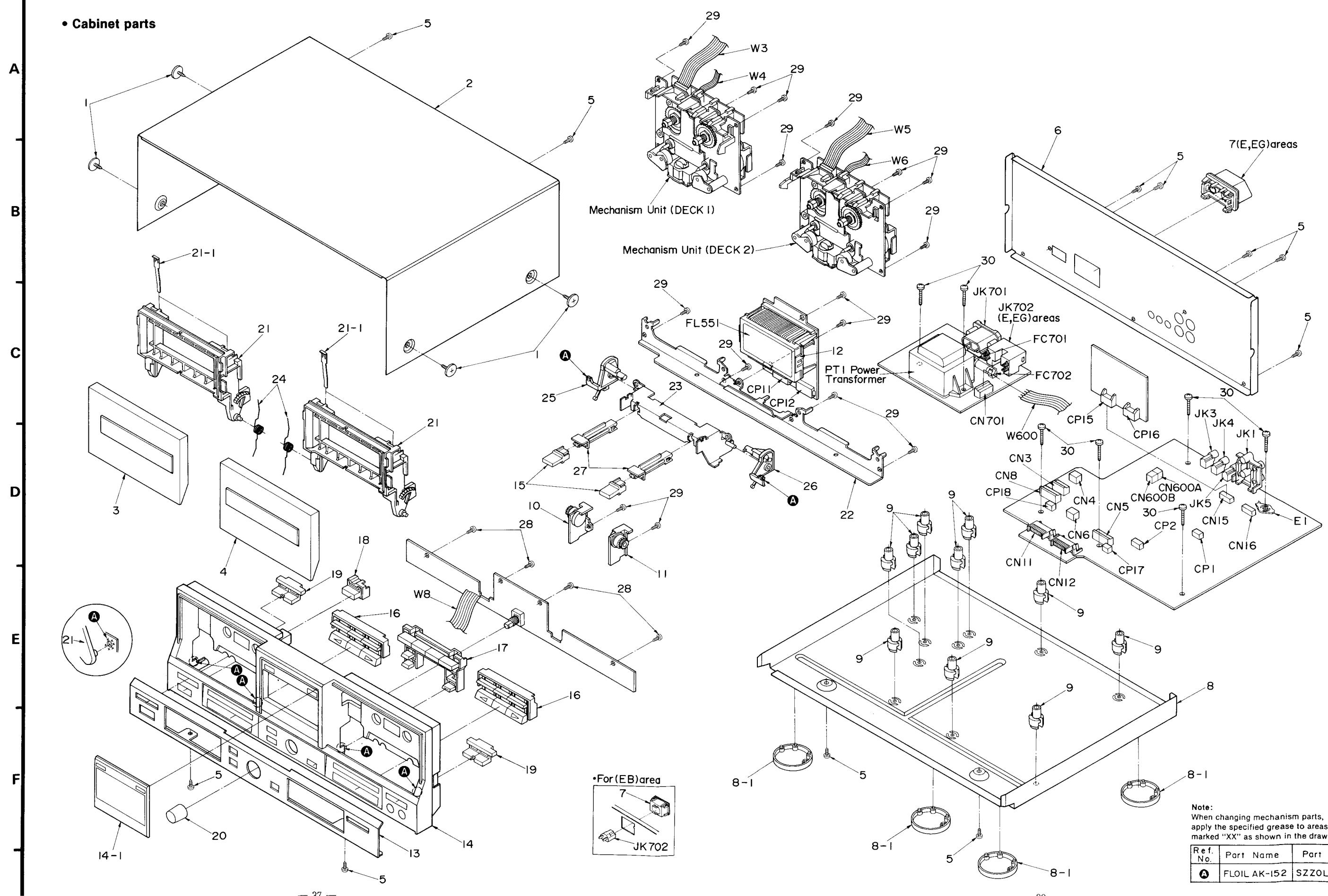
Ref. No.	Part No.	Values & Remarks
R557, 558	ERDS2TJ220T	1/4W 22
R559, 560	ERDS2TJ152	1/4W 1.5K
R561	ERDS2TJ102	1/4W 1K
R562	ERDS2TJ471	1/4W 470
R563, 564	ERDS2TJ103	1/4W 10K
R565	ERDS2TJ105T	1/4W 1M
R566, 567	ERDS2TJ103	1/4W 10K
R569	ERDS2TJ105T	1/4W 1M
R605	ERD2FCVJ5R6T	1/4W 5.6 △
R606	ERD2FCVJ4R7T	1/4W 4.7 △
R607, 608	ERDS2TJ102	1/4W 1K
R609, 610	ERDS2TJ1R5T	1/4W 1.5
R611	ERD2FCVG100T	1/4W 10 △
R612	ERD2FCVG270T	1/4W 27 △
R613	ERDS2TJ102	1/4W 1K
R614	ERDS2TJ222	1/4W 2.2K
R615, 616	ERDS2TJ270T	1/4W 27
R617, 618	ERQ16NKWR15E	1W 0.15
R619-621	ERDS2TJ560T	1/4W 56
R622	ERQ16NKWR15E	1W 0.15
R623	ERDS2TJ560T	1/4W 56
R624, 625	ERDS2TJ270T	1/4W 27
R632	ERD2FCVJ5R6T	1/4W 5.6 △
R701	ERDS2TJ821	1/4W 820
R702	ERDS2TJ102	1/4W 1K
R703	ERDS2TJ122	1/4W 1.2K
R704	ERDS2TJ152	1/4W 1.5K
R705	ERDS2TJ182	1/4W 1.8K
R706	ERDS2TJ222	1/4W 2.2K
R707	ERDS2TJ332	1/4W 3.3K
R708	ERDS2TJ472	1/4W 4.7K
R709	ERDS2TJ682T	1/4W 6.8K
R710	ERDS2TJ123	1/4W 12K
R713	ERDS2TJ821	1/4W 820
R714	ERDS2TJ102	1/4W 1K
R715	ERDS2TJ122	1/4W 1.2K
R716	ERDS2TJ152	1/4W 1.5K
R717	ERDS2TJ182	1/4W 1.8K
R718	ERDS2TJ222	1/4W 2.2K
R719	ERDS2TJ332	1/4W 3.3K
R720	ERDS2TJ472	1/4W 4.7K
R721	ERDS2TJ682T	1/4W 6.8K
R722	ERDS2TJ123	1/4W 12K
R825, 826	ERDS2TJ103	1/4W 10K
R827	ERDS2TJ563	1/4W 56K
R828	ERDS2TJ222	1/4W 2.2K
R829	ERDS2TJ392T	1/4W 3.9K
R830	ERDS2TJ103	1/4W 10K
R831	ERDS2TJ272T	1/4W 2.7K
R832	ERDS2TJ152	1/4W 1.5K
R837	ERDS2TJ473	1/4W 47K
R838	ERDS2TJ272T	1/4W 2.7K
R839	ERDS2TJ222	1/4W 2.2K
R840	ERDS2TJ102	1/4W 1K
R841	ERDS2TJ473	1/4W 47K
R842	ERDS2TJ183T	1/4W 18K
R843	ERDS2TJ393	1/4W 39K
R844	ERDS2TJ472	1/4W 4.7K
R845	ERDS2TJ823T	1/4W 82K
R846	ERDS2TJ101	1/4W 100
R847	ERDS2TJ122	1/4W 1.2K
R852, 853	ERD2FCVG470T	1/4W 47 △
R902	ERDS2TJ822	1/4W 8.2K
R903	ERDS2TJ393	1/4W 39K
R904, 905	ERDS2TJ222	1/4W 2.2K
R906	ERDS2TJ103	1/4W 10K
R907	ERDS2TJ563	1/4W 56K
R908-910	ERDS2TJ103	1/4W 10K
R911	ERDS2TJ392T	1/4W 3.9K
R912	ERDS2TJ222	1/4W 2.2K
R913	ERDS2TJ272T	1/4W 2.7K
R914	ERDS2TJ152	1/4W 1.5K
R915	ERDS2TJ473	1/4W 47K
R916	ERDS2TJ272T	1/4W 2.7K
R917, 918	ERDS2TJ103	1/4W 10K
R919	ERDS2TJ471	1/4W 470
R920-922	ERDS2TJ103	1/4W 10K
R923	ERDS2TJ100	1/4W 10
R924	ERDS2TJ103	1/4W 10K
R925	ERDS2TJ223	1/4W 22K
R926	ERDS2TJ100	1/4W 10
R927	ERDS2TJ223	1/4W 22K
R928	ERDS2TJ273	1/4W 27K
R931	ERDS2TJ102	1/4W 1K
R932	ERDS2TJ392T	1/4W 3.9K
R933	ERDS2TJ472	1/4W 4.7K
R934	ERDS2TJ105T	1/4W 1M
R935	ERDS2TJ182	1/4W 1.8K
R938, 939	ERDS2TJ472	1/4W 4.7K
R941	ERDS2TJ102	1/4W 1K
R943	ERDS2TJ103	1/4W 10K
R945	ERDS2TJ822	1/4W 8.2K
R948	ERDS2TJ184T	1/4W 180K
R949	ERDS2TJ103	1/4W 10K
R950	ERDS2TJ332	1/4W 3.3K
R951	ERDS2TJ103	1/4W 10K
R952	ERDS2TJ392T	1/4W 3.9K
R953	ERDS2TJ103	1/4W 10K
R954	ERDS2TJ223	1/4W 22K
R955	ERDS2TJ821	1/4W 820
R956	ERDS2TJ223	1/4W 22K
R957	ERDS2TJ821	1/4W 820
R958	ERDS2TJ223	1/4W 22K
R959	ERDS2TJ821	1/4W 820
R960	ERDS2TJ153	1/4W 15K
R961	ERDS2TJ221	1/4W 220
R962	ERDS2TJ103	1/4W 10K
R963	ERDS2TJ392T	1/4W 3.9K
R964	ERDS2TJ184T	1/4W 180K
R965	ERDS2TJ103	1/4W 10K
R966	ERDS2TJ223	1/4W 22K
R967	ERDS2TJ821	1/4W 820
R968, 969	ERDS2TJ472	1/4W 4.7K
R973	ERDS2TJ472	1/4W 4.7K
R977, 978	ERDS2TJ103	1/4W 10K
R979	ERDS2TJ153	1/4W 15K
R980-985	ERDS2TJ393	1/4W 39K
R986	ERDS2TJ103	1/4W 10K
R987	ERDS2TJ472	1/4W 4.7K
R990	ERDS2TJ100	1/4W 10
R993	ERDS2TJ103	1/4W 10K
R994	ERDS2TJ102	1/4W 1K
R995, 996	ERDS2TJ100	1/4W 10
R997	ERDS2TJ562	1/4W 5.6K
R998	ERDS2TJ100	1/4W 10
CAPACITORS		
C1-3	ECEA1HKA010B	50V 1U
C5, 6	ECEA1CKA220B	16V 22U
C7-10	ECBT1H561KB5	50V 560P
C11, 12	ECBT1H102KB5	50V 1000P
C13, 14	ECEA0JKA101B	6.3V 100U
C15, 16	ECQB1H682JZ3	50V 6800P
C17-20	ECEA1EKA4R7B	25V 4.7U
C21	ECEA0JKA101B	6.3V 100U
C25, 26	ECEA1EKA4R7B	25V 4.7U
C27, 28	ECBT1H561KB5	50V 560P
C29, 30	ECKR2H101KB5	500V 100P
C31, 32	ECBT1H181KB5	50V 180P
C33, 34	ECEA1HKA47B	50V 0.47U
C35, 36	ECQB1H472JZ	50V 4700P
C37, 38	ECQB1H223JZ3	50V 0.022U
C39, 40	ECQB1H103JZ	50V 0.01U
C41, 42	ECQB1H223JZ3	50V 0.022U
C43, 44	ECQB1H153JZ	50V 0.015U
C45, 46	ECBT1E103ZF	25V 0.01U
C49, 50	ECEA1CKA100B	16V 10U
C53, 54	ECQB1H563JZ3	50V 0.056U
C55	ECBT1E103ZF	25V 0.01U
C57, 58	ECEA1EKA470B	10V 47U
C63	ECEA1CKA100B	16V 10U
C64	ECEA1HN010	50V 1U
C71, 72	ECBT1H391KB5	50V 390P
C73, 74	ECBT1C472KR5	16V 4700P

Ref. No.	Part No.	Values & Remarks
C81-84	ECBT1H4R7KC5	50V 4.7P
C101, 102	ECBT1H102KB5	50V 1000P
C103, 104	ECKR2H101KB5	500V 100P
C105, 106	ECBT1H561KB5	50V 560P
C107, 108	ECEA1HKA47B	50V 0.47U
C109, 110	ECBT1H181KB5	50V 180P
C111, 112	ECQB1H273JZ	50V 0.027U
C113, 114	ECQB1H103JZ	50V 0.01U
C115, 116	ECQV1H563JZ3	50V 0.056U
C117, 118	ECQB1H153JZ	50V 0.015U
C119, 120	ECEA1EKA4R7B	25V 4.7U
C121	ECBT1E103ZF	25V 0.01U
C122	ECQB1H822JZ	50V 8200P
C131, 132	ECQB1H222KB	50V 6800P
C133, 134	ECQB1H153JZ	50V 0.015U
C135, 136	ECQB1H822JZ	50V 8200P
C137, 138	ECQB1H153JZ	50V 0.015U
C301	ECQP1153JZ	100V 0.015U
C302	ECEA1EKA4R7B	25V 4.7U
C303	ECKR1H392KB5	50V 3900P
C304, 305	ECKW1H222KB5	50V 2200P
C306	ECKD1H682KB	50V 6800P
C309	ECKR1H103ZF5	50V 0.01U
C310	ECKR1H472KB5	50V 4700P

## ■ EXPLODED VIEW

1 2 3 4 5 6 7 8 9

## • Cabinet parts



## REPLACEMENT PARTS LIST

Notes : \* Important safety notice:

Components identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

\* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
						ACCESSORIES	
		CABINET AND CHASSIS					
1	RHD30007	SCREW		A1	RQF1078	INSTRUCTION MANUAL UNIT	(E)
2	RKM0024-2K	CABINET		A1	RQF1079	INSTRUCTION MANUAL UNIT	(EB)
3	RYF0136-K	CASSETTE LID(DECK1)		A1	RQF1080	INSTRUCTION MANUAL UNIT	(EG)
4	RYF0137-K	CASSETTE LID(DECK2)		A1-1	RFKSSX902E-K	INSTRUCTION MANUAL ASS' Y	(E)
5	XTBS3+8JF21	SCREW		A1-1	RQT0984-B	INSTRUCTION MANUAL	(EB)
6	RGR0102B-B	REAR PANEL	(EB)	A1-1	RQT0985-D	INSTRUCTION MANUAL	(EG)
6	RGR0102C-B	REAR PANEL	(EG)	A1-2	RQA0013	WARRANTY CARD	
6	RGR0102C-D	REAR PANEL	(E)	A1-3	RQCB0169	SERVICENTER LIST	
7	RJS1A4802-A	AC OUTLET COVER	(EB)	A2	SJA187	AC POWER SUPPLY CORD	(E, EG) $\Delta$
7	RJS1A4902-A	AC OUTLET COVER	(E, EG)	A2	SJA188	AC POWER SUPPLY CORD	(EB) $\Delta$
8	RFKJSX502E-K	BOTTOM BOARD ASS' Y		A3	SJP2249-3	STEREO CONNECTION CABLE	
8-1	RKA0011-2	FOOT		A4	SJP2257T	L-TYPE CABLE	
9	RKQ0089	P. C. B. HOLDER					
10	RFKNSDN7AK	DAMPER GEAR ASS' Y(L)					
11	RFKNSDN7BK	DAMPER GEAR ASS' Y(R)					
12	RMN0049	FL HOLDER					
13	RGG0066-K	FRONT AL PANEL					
14	RFKGSX502E-K	FRONT PANEL ASS' Y					
14-1	RKW0124A-K1	TRANSPARENT PLATE					
15	RGU0461-K	BUTTON, EJECT					
16	RGU0601-K	BUTTON, OPERATION					
17	RGU0603-K	BUTTON, COUNTER/SYNCHRO					
18	RGU0604-K	BUTTON, POWER					
19	RGU0605-K	BUTTON, REC					
20	RGW0098-K	KNOB, REC LEVEL					
21	RKF0169A-K	CASSETTE HOLDER					
21-1	QBP2006A	TAPE PRESSURE SPRING					
22	RMA0159-1	MECHANISM ANGLE					
23	RMA0373	EJECT ANGLE					
24	RME0068-1	SPRING					
25	RML0185-1	EJECT LEVER(L)					
26	RML0186-1	EJECT LEVER(R)					
27	RMM0041	EJECT ROD					
28	XTBS26+10J	SCREW					
29	XTB3+10JFZ	SCREW					
30	XTB3+20JFZ	SCREW					
		PACKING MATERIAL					
P1	RPG0845	CARTON BOX					
P2	RPN0383-1	PAD					
P3	SPSD152	ACCESSORIES BOX					
P4	SPP756	PROTECTION COVER					

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
				143	RUB515ZA	LEVER	
		MECHANISM PARTS LIST		144	RUB509ZA	LEVER	
DECK1				145	RDV0015	CAPSTAN BELT	
101	RXQ0008	HEAD BLOCK(REC. /PLAYBACK)		146	RUB507ZD	EJECT ROD(R)	
102	RUA793ZF	HEAD BASE		148	RUW144ZA	SPRING	
103	RZLAR300	ROD		149	RHG3032ZA	RUBBER CUSHION	
103-1	RJW143ZA	SPRING		150	RNL180ZB	DAMPER ARM	
104	1UB0089ZA	ARM		151	REX0059	LEAD WIRE BLOCK(5P)	
104-1	RJW148ZA	SPRING		161	XTW2+6L	SCREW	
105	1DM0018ZA	REEL TABLE(R)		162	XTW2+8L	SCREW	
106	1DM0017ZA	REEL TABLE(F)		163	XTN26+7J	SCREW	
107	RML0069-1	LEVER		164	RHE5203ZA	SCREW	
108	RDG5772ZC	GEAR		165	XTW2+8S	SCREW	
109	RUB508ZB	BRAKE ROD		166	XYC2+JF16	SCREW	
110	RUB506ZB	LEVER		167	RHD26002	SCREW	
111	1UB0088ZA	ARM(R)		168	RJS10T7ZA	CONNECTOR(10P), J971	
111-1	RJW141ZA	SPRING		169	RHD26003	SCREW	
112	1UB0087ZA	ARM(F)		170	REX0145	READ WIRE BLOCK(3P)	
112-1	RJW140ZC	SPRING					
114	RNL1ZD	DAMPER ARM					
115	RUB503ZD	MAIN LEVER					
116	RZUSX980	CHASSIS					
117	RJW142ZA	SPRING					
118	RUD105ZA	SPRING					
120	RJW139ZA	SPRING					
121	RFM133ZA	DC MOTOR					
122	1UE0015ZA	PLUNGER					
123	RJB428ZE	MOVING IRON CORE					
124	RUL1030XB	ANGLE					
125	RMD5014ZC	ANGLE					
126	RDG5927ZG	GEAR					
127	1DW0053ZB	FLYWHEEL(F)					
127-1	RNW139ZA	WASHER					
128	1DW0054ZB	FLYWHEEL(R)					
128-1	RNW138ZA	WASHER					
129	1DG0006ZA	REEL TABLE GEAR					
130	RUB513ZD	ARM					
131	1UB0091ZA	LEVER					
131-1	RJW146ZA	SPRING					
132	1DR0011ZA	MAIN PULLEY					
133	RDV90ZB	BELT					
134	RDG5769ZA	REEL TABLE GEAR					
135	RUQ111ZB	SPRING					
136	RJW145ZA	SPRING					
137	1UB0090ZA	ROD					
137-1	RUB512ZB	F. F. ROD					
138	RDG5773ZB	GEAR					
139	RJQ112ZA	SPRING					
140	RUS609ZC	TAPE PRESSURE SPRING					
141	RUB514ZC	LEVER					
142	RJW147ZA	SPRING					

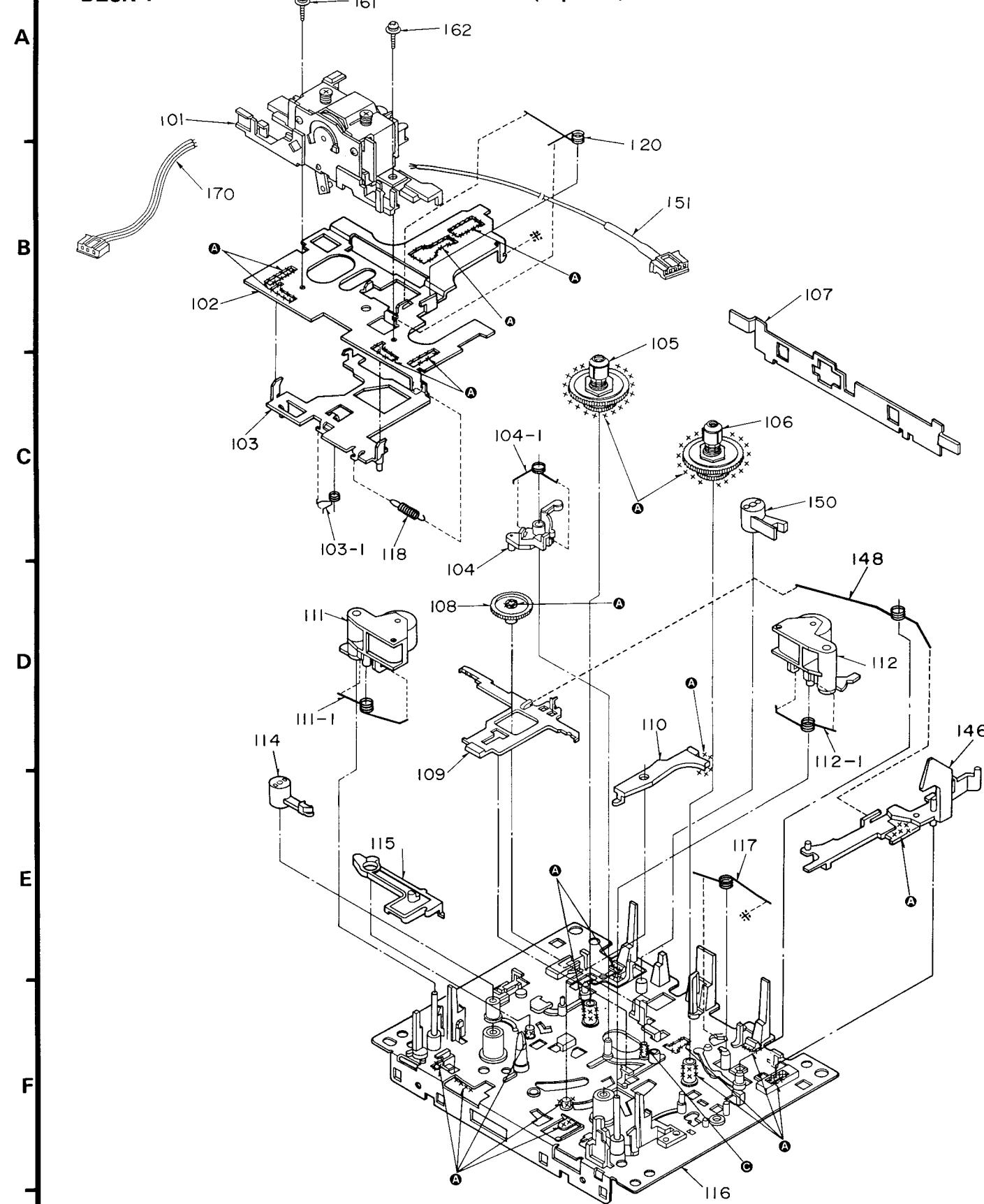
## ■ EXPLODED VIEWS

1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ 8 \_\_\_\_\_ 9 \_\_\_\_\_

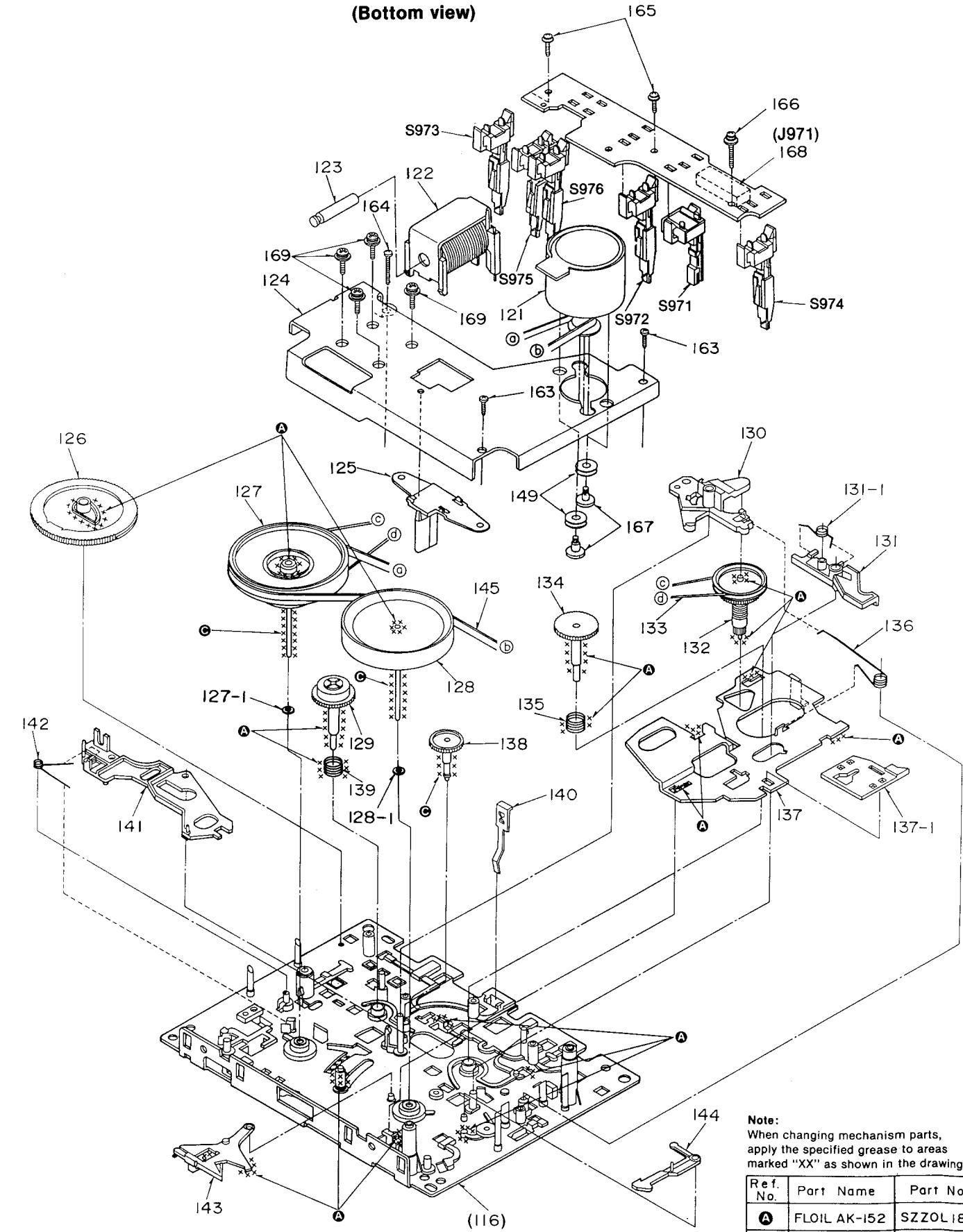
- Mechanical parts

## ● DECK 1

(Top view)



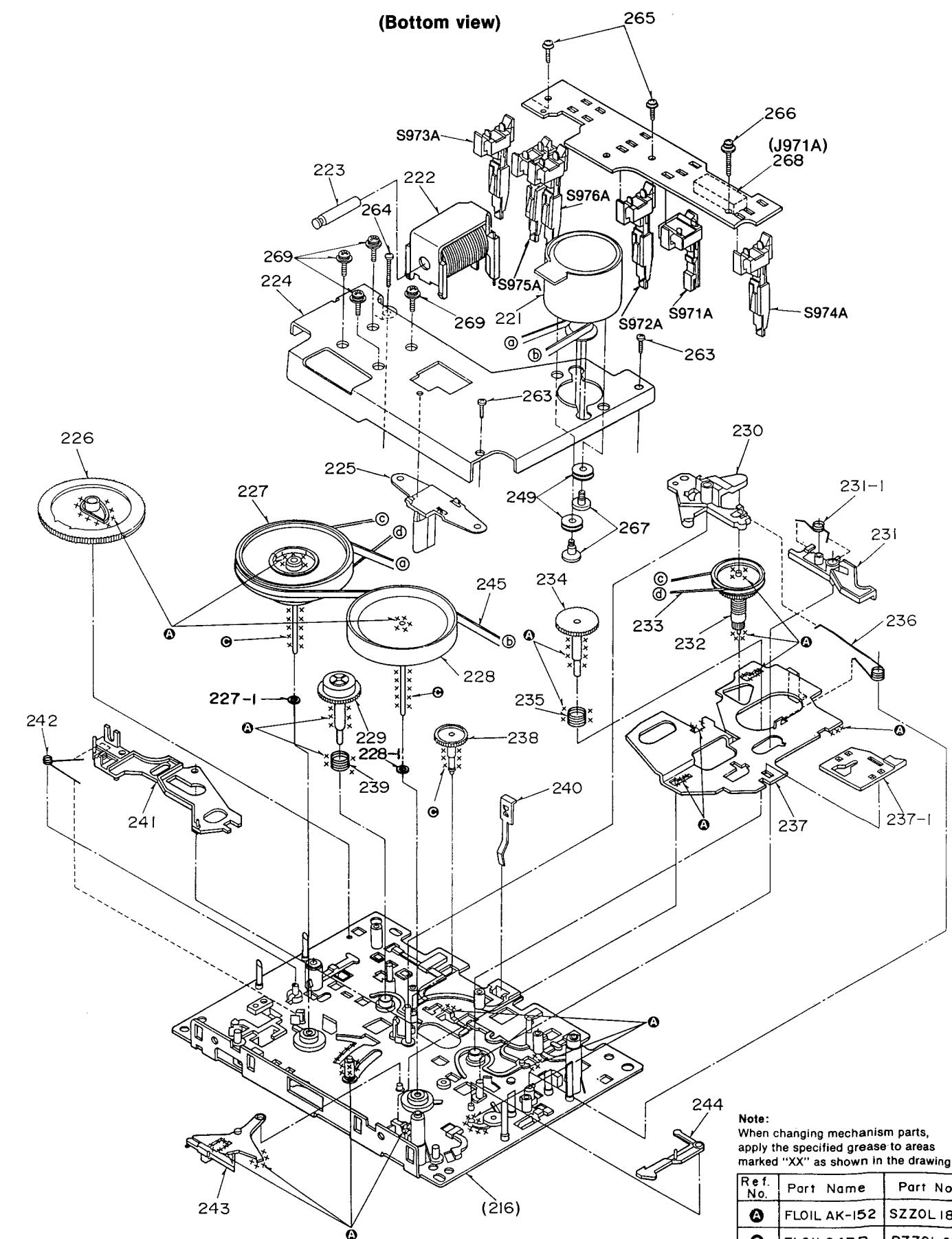
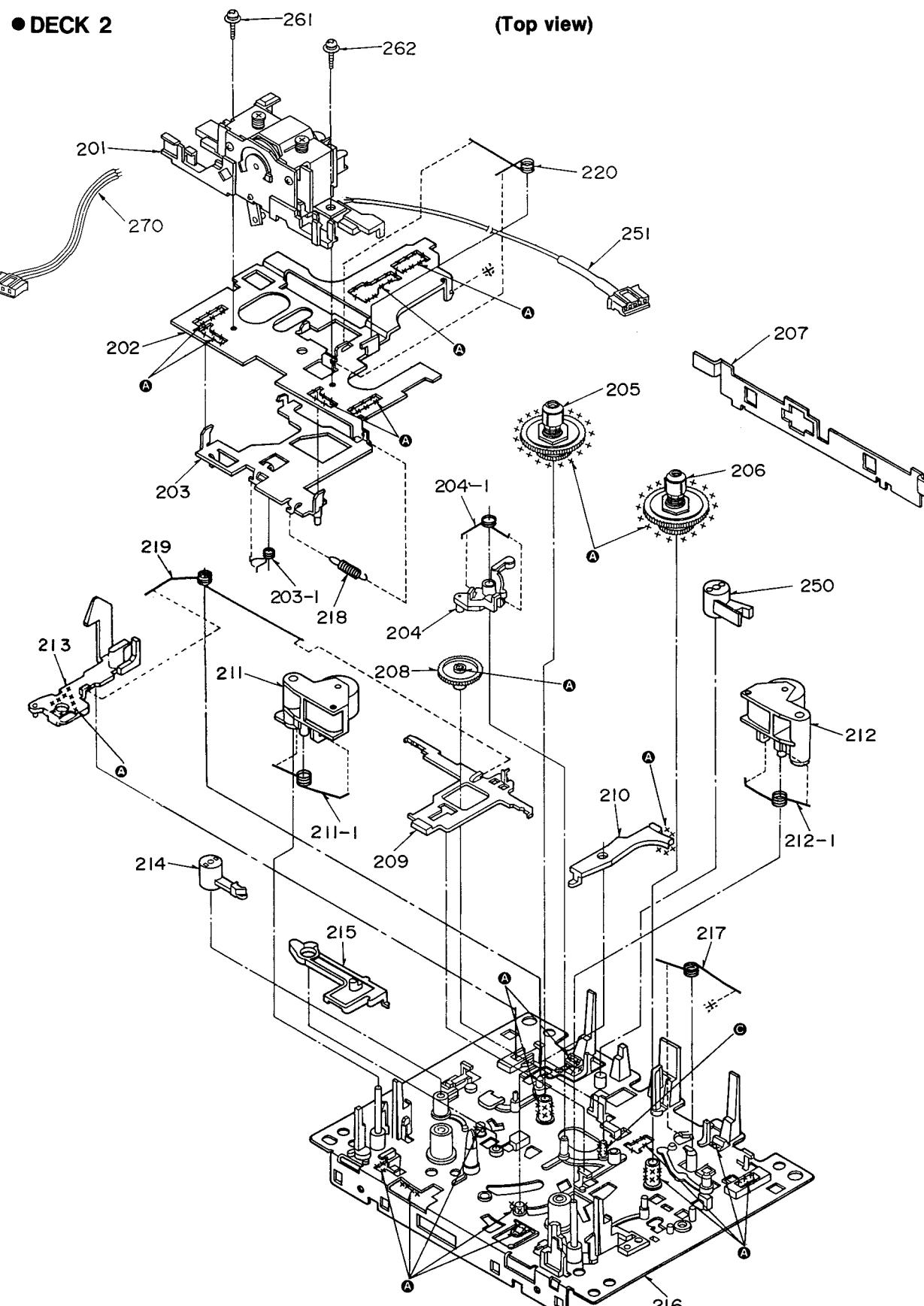
**(Bottom view)**



**Note:**  
When changing mechanism parts,  
apply the specified grease to areas  
marked "XX" as shown in the drawing.

Ref. No.	Part Name	Part No.
A	FLOIL AK-152	SZZOL 18
C	FLOIL947P	RZZOL 02

1 2 3 4 5 6 7 8 9



Note:  
When changing mechanism parts,  
apply the specified grease to areas  
marked "XX" as shown in the drawing.

Ref. No.	Part Name	Part No.
Ⓐ	FLOIL AK-152	SZZOL18
Ⓒ	FLOIL947P	RZZOL02

## REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description	Remarks
MECHANISM PARTS LIST			
DECK2			
201	RXQ0008	HEAD BLOCK(REC./PLAYBACK)	
202	RJA793ZF	HEAD BASE	
203	RZLAR300	ROD	
203-1	RJW143ZA	SPRING	
204	IUB0089ZA	ARM	
204-1	RJW148ZA	SPRING	
205	1DM0018ZA	REEL TABLE(R)	
206	1DM0017ZA	REEL TABLE(F)	
207	RML0069-1	LEVER	
208	RDG5772ZC	GEAR	
209	RJB508ZB	BRAKE ROD	
210	RJB506ZB	LEVER	
211	IUB0088ZA	ARM(R)	
211-1	RJW141ZA	SPRING	
212	IUB0087ZA	ARM(F)	
212-1	RJW140ZC	SPRING	
213	RUB541ZB	EJECT ROD(L)	
214	RNL12D	DAMPER ARM	
215	RUB503ZD	MAIN LEVER	
216	RZUSX980	CHASSIS	
217	RJW142ZA	SPRING	
218	RJD105ZA	SPRING	
219	RJW167ZA	SPRING	
220	RJW139ZA	SPRING	
221	RFM133ZA	DC MOTOR	
222	IUE0015ZA	PLUNGER	
223	RJB428ZE	MOVING IRON CORE	
224	RUL1030XB	ANGLE	
225	RMD5014ZC	ANGLE	
226	RDG5927ZG	GEAR	
227	1DW0053ZB	FLYWHEEL(F)	
227-1	RNW139ZA	WASHER	
228	1DW0054ZB	FLYWHEEL(R)	
228-1	RNW138ZA	WASHER	
229	1DG0006ZA	REEL TABLE GEAR	
230	RJB513ZD	ARM	
231	IUB0091ZA	LEVER	
231-1	RJW146ZA	SPRING	
232	1DR0011ZA	MAIN PULLEY	
233	RDV902B	BELT	
234	RDG5769ZA	REEL TABLE GEAR	
235	RJQ111ZB	SPRING	
236	RJW145ZA	SPRING	
237	IUB0090ZA	ROD	
237-1	RJB512ZB	F. F. ROD	
238	RDG5773ZB	GEAR	
239	RJQ112ZA	SPRING	
240	RJS609ZC	TAPE PRESSURE SPRING	

Ref. No.	Part No.	Part Name & Description	Remarks
241	RJB514ZC	LEVER	
242	RJW147ZA	SPRING	
243	RJB515ZA	LEVER	
244	RUB509ZA	LEVER	
245	RDV0015	CAPSTAN BELT	
249	RHG3032ZA	RUBBER CUSHION	
250	RNL180ZB	DAMPER ARM	
251	REX0059	LEAD WIRE BLOCK(5P)	
261	XTW2+6L	SCREW	
262	XTW2+8L	SCREW	
263	XTN26+7J	SCREW	
264	RHE5203ZA	SCREW	
265	XTW2+8S	SCREW	
266	XYC2+JF16	SCREW	
267	RHD26002	SCREW	
268	RJS10T7ZA	CONNECTOR(10P), J971A	
269	RHD26003	SCREW	
270	REX0145	LEAD WIRE BLOCK(3P)	